

7 Series



Owner's Handbook



728i

728iL

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725tds

Congratulations on your choice of a BMW.

The better you are acquainted with your car, the easier you will discover driving it to be. We would therefore like to offer you the following advice.

This Owner's Handbook contains important information on operating and looking after your BMW. Please read it carefully before setting out in your new car, so that you are fully familiar with the technical advantages of your BMW. It also contains useful information on care and maintenance, to uphold both the car's operating safety and its full resale value.

We wish you an enjoyable driving experience.

BMW AG

Notes on this Owner's Handbook
We have tried to make all the information in this Owner's Handbook easy to find. The quickest access to a particular topic or item is by consulting the detailed alphabetical index at the end. For initial information on your car, however, refer to the first section of the handbook. The detailed list of contents immediately following the list of main headings is intended to arouse your curiosity about your new BMW and encourage you to read this information carefully.

If you ever wish to sell your BMW, please remember to hand over your Owner's Handbook; this forms a legal component of your vehicle.

If you have any queries, BMW Service will be glad to advise you.

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English VIII/97

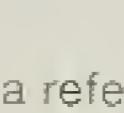
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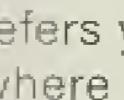
 identifies information which you should definitely read – for your own safety, that of others and to avoid damage to the vehicle. ◀

 indicates information and instructions concerning special features of the car. ◀

 is a reference to subsequent recycling. ◀

◀ marks the end of each individual item of information.

* identifies optional extras or specific national-market items of equipment, and accessories.

 refers you to car components where it is advisable to consult the Owner's Handbook.

Your own car

When you ordered your BMW, you chose various items of equipment. This handbook describes all models and equipment specifications which BMW offers within this particular model line.

This explains why the handbook may also contain details of items which you have not ordered. The differences can easily be identified by the asterisk* shown against optional extras.

If your BMW was supplied with equipment not described in this Owner's Handbook (e.g. radio, car phone), you will receive additional operating manuals which you are also requested to read carefully.

The high safety and quality standards of BMW vehicles are maintained by unceasing development work on designs, equipment and accessories. Because of this, your car may differ from the information supplied in the Owner's Handbook. Nor can errors and omissions be entirely ruled out. You are therefore asked to appreciate that no legal claims can be entertained on the basis of the data, illustrations or descriptions in this handbook.

Status at time of printing

Fuel consumption data are as determined at the time of closing for print. All dimensions, weights and performance figures in the Owner's Handbook refer to the Deutsche Institut für Normung e. V. (DIN) and achieve the tolerances stipulated in these standards. Deviations may occur in respect of certain national-market versions of the cars. In cars with right-hand drive, some controls will be located differently from those illustrated in this handbook.

BMW cannot accept liability for parts or accessory products of any kind which it has not approved.

BMW is unable to assess each individual product of outside origin as to its suitability for use on BMW vehicles without safety risk. Nor is any such guarantee necessarily available if a Technical Inspection Authority (for instance the German TÜV) has approved the product or if it has been granted a General Operating Permit. These tests cannot always take into account the full range of operating conditions applicable to BMW vehicles and may therefore be inadequate.

For your own safety

 Use only parts and accessories that have been approved by BMW. Parts and products approved by BMW have been tested for their safety, correct operation and suitability for BMW vehicles. BMW accepts product liability for them.

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In other words, the road safety standards and also the long-term value of your car could be placed at risk if you undertake or commission modifications using parts that BMW has not approved. Original BMW parts and accessories, other BMW-approved products and competent advice on all related matters are obtainable from BMW Service. ◀



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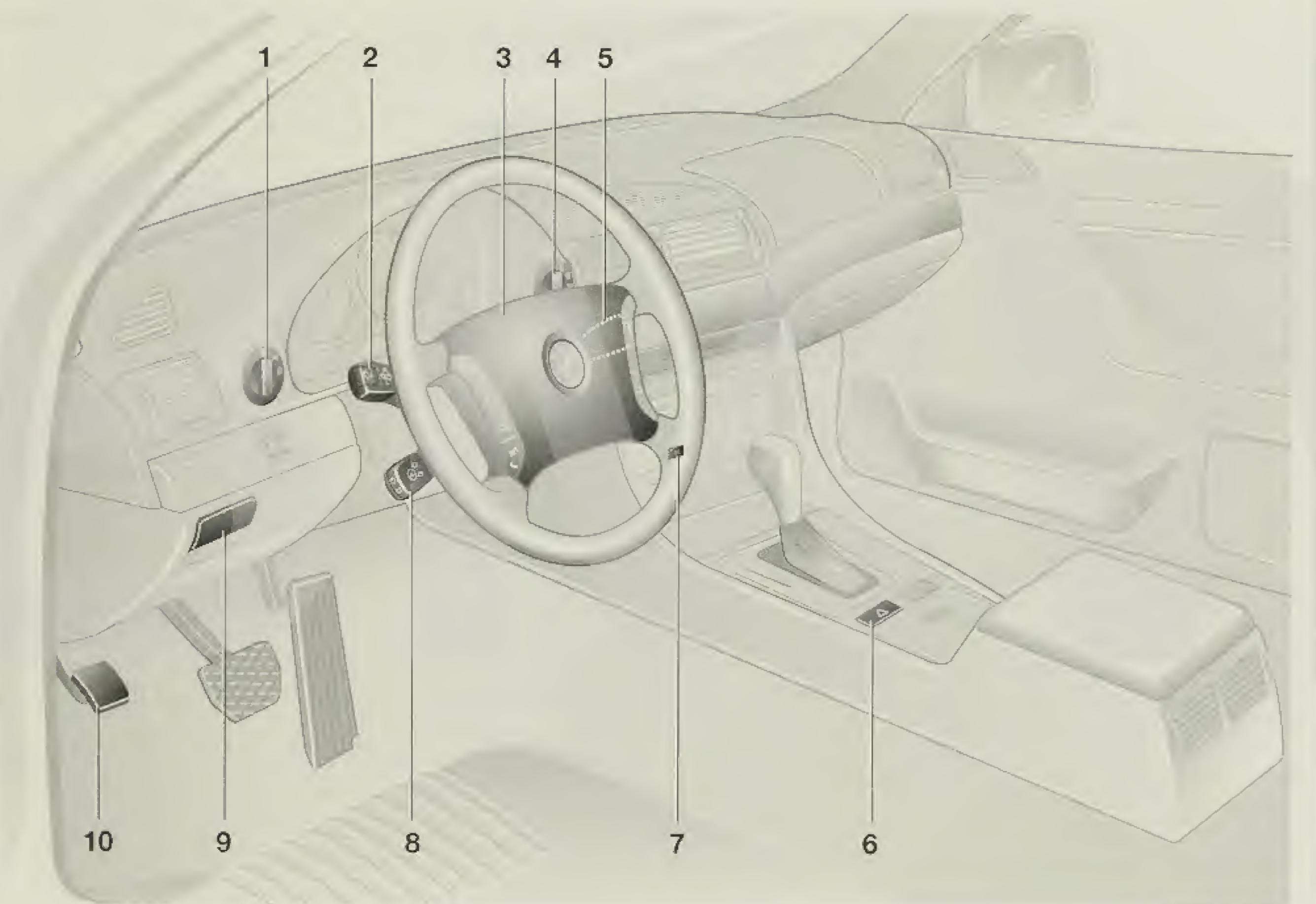
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Driving area

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Instrument panel

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16 Telltale and warning lights

Functional check

Telltale and warning lights marked " " come on when the ignition key is turned to position 2 and remain on for varying periods after the engine has been started as a means of checking equipment functions.

Flashing turn indicator repeaters, green

 These flash when turn indicators are in use, including trailer flashers if a trailer is being towed.

Rapid flashing: the system has a fault. Further details: page 58

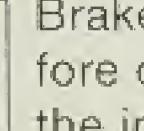
High-beam headlights, blue

 Comes on when the high beams are in use or the driver flashes the headlights. Further details: page 58

Parking brake, red

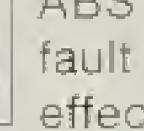
 Comes on when the parking brake is applied. Further details: page 62

Brake hydraulics, red

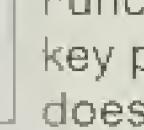
 Brake fluid level is too low. Before continuing the journey, note the information on pages 134 and 137.

Also lights up when the message "CHECK BRAKE LININGS" appears in the Check Control.

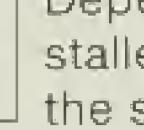
Anti-lock brake system (ABS), yellow

 ABS is switched off because a fault has developed. This has no effect on the car's ability to brake. Have the system checked by BMW Service. Further details: page 162

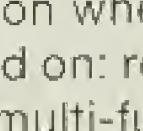
Airbags, red

 Functional check from ignition key position 1 on. If the light does not come on during the functional check, or comes on again during the journey, have the system examined by BMW Service. Further details: page 53

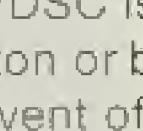
Fasten seat belts, red

 Depending on the version installed, a signal* is heard and at the same time a display* appears in the Check Control. It remains on, depending on version, until the seat belt has been fastened. Further details of seat belts: page 51

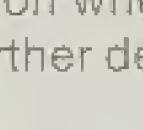
Cruise control, green

 Comes on when the system is switched on: ready for operation via the multi-functional steering wheel. Further details: page 111

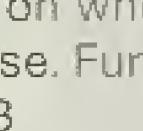
Automatic Stability Control plus Traction (ASC+T)/ Dynamic Stability Control (DSC)*, yellow

 ASC+T/DSC is switched off at the button or because of a fault. In the event of a fault, have it checked by BMW Service. Further details: page 98

Fog lights, green

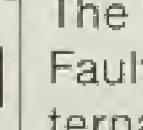
 Comes on when fog lights are in use. Further details: page 58

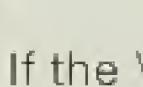
Rear fog lights, yellow

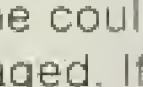
 Comes on when rear fog lights are in use. Further details: page 58

Telltale and warning lights

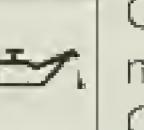
Battery charge telltale, red

 The battery is not being charged. Fault at alternator V-belt or in alternator charging circuit. Consult the nearest BMW Service point.

 If the V-belt is defective, do not continue your journey, otherwise your engine could overheat and become damaged. If the V-belt is defective, increased steering effort is required. ◀

 Do not continue the journey, otherwise the engine could be damaged as a result of inadequate lubrication. ◀

Engine oil pressure, red

 Comes on during journey and message "STOP! ENGINE OILPRESS" appears on Check Control: stop at once and switch off the engine. Check engine oil level and top up if necessary. If the oil level is correct: Consult the nearest BMW Service point.

 Do not continue the journey, otherwise the engine could be damaged as a result of inadequate lubrication. ◀

18 Distance recorder, outside temperature display



Distance recorder

You can activate the displays shown here in ignition setting 0 by pressing the button (arrow) on the instrument cluster.

Trip distance recorder

To reset to zero, press the button (arrow) after moving ignition key to setting 1.

Outside temperature display

In ignition key position 1 and beyond, the outside temperature is displayed.

You can change the unit of measurement (°C/°F) by pressing the button (arrow) in ignition setting 1

1 and holding it down,
2 then turning the ignition key to 0.

Revolution counter



Ice warning

If the outside temperature falls to +3 °C, a signal sounds as a warning and the display flashes for a brief period.

The warning is repeated if the temperature rises at least once to +6 °C and then fallen to +3 °C again.



The ice warning is not able to warn of the possibility of black ice forming at temperatures in excess of +3 °C e.g. on bridges and shaded road surfaces.◀

Energy Control



Never allow the engine to run in the red zone of the revolution counter.

In this zone the fuel supply is interrupted to protect the engine. This becomes evident as an intermittent reduction in available power.

Fuel gauge



Shows momentary fuel consumption. This enables you to check how economical and environmentally friendly your current driving style is.

As the car slows to a halt, the needle will drift to the top end of the scale.

- 81 – BMW 728i/L, 725tds
- 101 – BMW 735i/L, 740i/L
- 121 – BMW 750i/L

of fuel remaining in the tank.

Fuel tank capacity: page 187

Certain vehicle positions, e.g. driving uphill for prolonged periods, may cause slight fluctuations in the fuel gauge reading.



Refuel in good time, otherwise the engine and/or the catalytic converter can be damaged by driving until the last drop of fuel in the tank.◀

**Blue**

The engine is still cold. Drive at moderate engine and road speeds.

Red

"COOLANT TEMPERATURE" display in Check Control: the engine is too hot. Switch it off at once and allow to cool down.

Between the coloured zones

Normal operating temperature. At high outside temperatures or when loads on the car are severe, the needle may move up as far as the beginning of the red zone.

Checking coolant level: see page 134.

**Green light-emitting diodes**

As these go out one by one, the next maintenance routine for your car is coming nearer.

Yellow LED

This lights up in conjunction with OILSERVICE or INSPECTION.

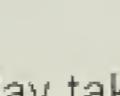
A service routine is due. Please contact BMW Service to agree a date and time.

Red LED

The service routine is overdue.

Clock symbol

Shows that brake fluid renewal is due.



The display takes no account of downtime when the battery is disconnected.

In such cases you must ensure that the brake fluid is renewed every two years regardless of the display. Also refer to page 134. ▶



1 Telephone: receiving a call, dialling, call terminated

2 Radio/telephone: changeover switch

3 Radio/telephone: reverse search

4 Radio/telephone: volume control

5 Radio/telephone: forward search

6 Horn, entire surface

7 Cruise control: activate

8 Cruise control: store and accelerate (+), decelerate and store (-)

9 Cruise control: Switching on/off

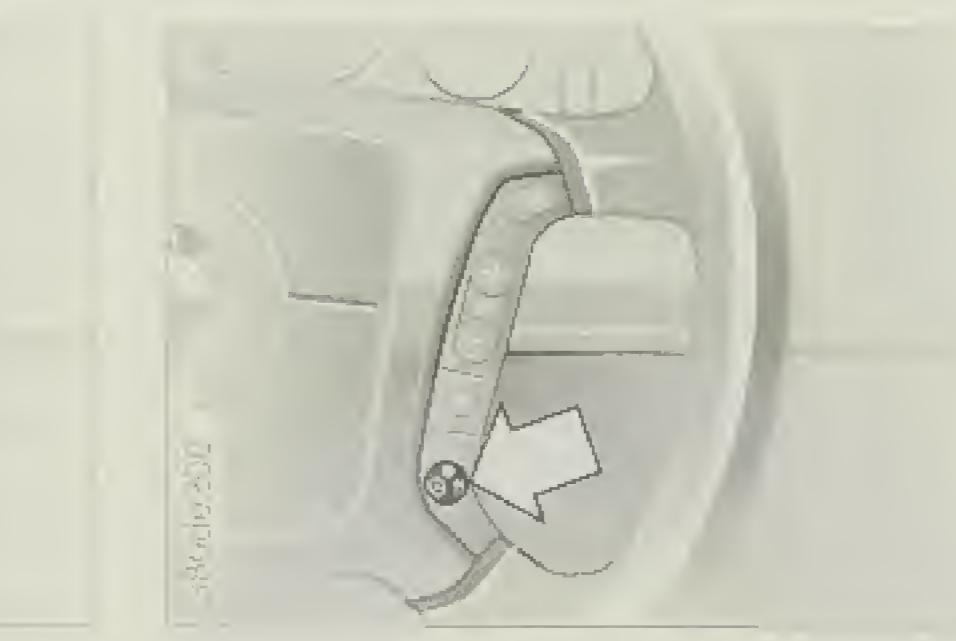
10 Recirculated-air mode and AUC or steering wheel heating: switching on and off. ▶

The following keys are integrated into the multi-functional steering wheel to allow rapid operation of the following functions without the driver being distracted from the traffic situation:

- ▶ various radio functions
- recirculated-air mode for the air conditioning system
- heated steering wheel
- cruise control and
- various telephone functions

▶ When operating the MFL, the corresponding systems must be switched on. ▶

The illustration shows a full set of controls. For further details, please consult the description for each equipment range.



The steering wheel heating function is operational in ignition key position 2. To switch on and off, press the button (arrow).

When the steering wheel is being heated, the telltale light in the button is on.

If your multi-functional steering wheel does not have a heated rim, this button activates and deactivates the recirculated-air mode (see previous column).



0 Steering locked

The key can only be inserted and removed in this position.

After removing the key, turn the steering wheel slightly if necessary until the steering lock engages.

Automatic-transmission cars:

Do not move the selector lever away from position P until the engine is running (ignition key position 2).

To turn the key back to position 0 or remove it, first move the selector lever to P.

1 Steering released

Turn the key from 0 to 1 (move the steering wheel slightly if necessary)

2 Ignition switched on/ BMW 725tds: preheating

All electrical consumers are ready to operate.

3 Starter motor operated

Starting the engine

Before starting

- ▷ apply the parking brake.
- ▷ the manual-shift gear lever should be in neutral; the automatic transmission selector lever should be in P or N.
- ▷ at very low outside temperatures, keep the clutch pedal pressed down.

Cars with spark-ignition engine

Start the engine without depressing the accelerator pedal.



BMW 728i/L, BMW 735i/L and 740i/L with manual transmission:

Allow the starter motor to run for a reasonable time, but not for more than about 20 seconds. As soon as the engine fires, release the ignition key.

BMW 750i/L, BMW 735i/L and 740i/L with automatic transmission:

Your car has a convenient-starting function. It is sufficient to turn the ignition key briefly to position 3 (to operate the starter motor), then to release it.

The starter motor is then operated automatically for a certain time; it cuts out automatically once the engine has started.

Starting the engine

If the battery voltage is low, automatic starting cannot be activated, or the function is interrupted.

The engine can then be started with the aid of jumper leads (see page 144). All models:

Do not allow the engine to warm up at a standstill, but drive off as soon as possible, using moderate engine speeds.◀

If the engine does not start first time, for instance if it is very cold or very hot:

depress the accelerator pedal half-way while starting the engine.

BMW 728i/L, 735i/L, 740i/L:

Cold starts at very low ambient temperatures (below approx. -15°C) at high altitude (more than 1000 m (approx. 3300 ft) above sea level):

always turn over the starter motor for about 10 seconds the first time it is operated.

▷ depress the accelerator pedal half-way while starting the engine.

If the car is to be used for lengthy periods at high altitudes and at extremely low temperatures, have the engine oil changed to 5W-X grade (see page 132). Consult BMW Service if necessary.

Cars with diesel engine

When the engine is cold:

- ▷ leave ignition key in position 2 until the word "Preheat" goes out.
- ▷ start the engine.

At extremely low temperatures, the starter motor may have to be run for up to 40 seconds.

When the engine is warm:

- ▷ the word "Preheat" does not light up: the engine can be started immediately.

Movement of the accelerator pedal has no influence on the starting process.

Do not allow the engine to warm up at a standstill, but drive off as soon as possible, using moderate engine speeds.

Bleeding the diesel fuel system:
Even if the fuel tank has been run dry, the fuel system does not normally need to be bled.

If you nevertheless encounter difficulties in starting the engine:

- ▷ Run the starter motor for app. 20 seconds.



Never run engine in closed rooms. The exhaust gas contains carbon monoxide, which is colourless and odourless, but highly toxic. Inhalation of exhaust gas constitutes a severe health risk and can lead to unconsciousness with fatal consequences. Never leave the car unattended with the engine running, as it then represents a serious potential hazard.◀

24 Stopping the engine

Turn the ignition key back to 1 or 0.

! Never pull out the ignition key when the car is moving, or the steering lock will engage.

Whenever leaving the car, always remove the ignition key and lock the steering wheel.

Manual-gearbox cars: when parking on a slope, always apply the parking brake, as engaging 1st gear or reverse may not always prevent the car sufficiently from rolling away. Automatic-transmission cars: select position P. 

Running in

Please comply with the following instructions, which are intended to ensure that your car achieves its optimum operating life and economy.

Engine and final drive

The first 2000 km (app. 1250 miles): Drive the car at varying engine and road speeds, but do not exceed the engine or road speeds stated below.

petrol-engined cars:

6-cylinder: 4500/min or 160 km/h (99 mile/h)

8- and 12-cylinder: 4500/min or 170 km/h (106 mile/h)

diesel-engined cars:

3500/min or 150 km/h (93 mile/h)

Avoid full throttle and do not use the automatic transmission kick-down.

From a distance reading of 2000 km (app. 1300 miles) on, engine and road speeds can be gradually increased.

Comply with these running-in instructions again if an exchange engine or final drive is fitted later in the car's life.

Refuelling

Tyres

New tyres do not achieve their full road grip immediately, for production reasons. You should therefore drive in a restrained manner for the first 300 km (app. 200 miles).

Brakes

Brake pads and discs do not achieve a favourable wear and contact pattern until the car has covered about 500 km (app. 300 miles).



To fold open the fuel filler cap, press on front edge.

Place the screw cap in the holder on the flap.

To release the filler flap if the central locking system fails, see page 149.

! When handling fuel or filling the car's tank, comply with the safety regulations displayed by garages and filling stations. 

When refuelling, insert the filler nozzle in the mouth of the fuel tank. If the filler nozzle is raised during refuelling,

► the supply of fuel will be cut off prematurely
► and on filler nozzles with fuel vapour recovery, the recirculating function will be less effective.

Fuel grade

Spark-ignition engine with catalytic converter

The engine should be run exclusively on unleaded fuel. Since the engines have a knock control function, they can run on different grades of fuel.

Minimum fuel grade:

► regular-grade unleaded or leaded fuel (octane number 91, Research Method).

The rated performance and fuel consumption values are achieved with:

► premium-grade unleaded fuel (octane number 95, Research Method).

This fuel is also known as:

DIN EN 228 or Euro-Super.

For higher performance and lower fuel consumption, it is also possible to use:

Super Plus/premium plus fuel (octane number 98, Research Method).

! Premium-grade leaded fuel (octane number 98, Research Method).

Premium-grade fuel is also sold under the German standard designation

DIN 51 600.

Diesel engine with catalytic converter

► diesel oil to DIN EN 590 standard.

For winter-grade diesel oil, see

page 156.

! Do not add rape seed oil/methyl ester (RME) or biodiesel fuel to the tank, or the engine may be damaged. 

engines have a knock control function, they can run on different grades of fuel. Minimum fuel grade:
► regular-grade unleaded or leaded fuel (octane number 91, Research Method).
The rated performance and fuel consumption values are achieved with:
► premium-grade unleaded fuel (octane number 95, Research Method).
This fuel is also known as:
DIN EN 228 or Euro-Super.
For higher performance and lower fuel consumption, it is also possible to use:
Super Plus/premium plus fuel (octane number 98, Research Method) or
Premium-grade leaded fuel (octane number 98, Research Method).
Premium-grade fuel is also sold under the German standard designation
DIN 51 600.
! Never add fuel containing lead to a car with a catalytic converter, or this device and the oxygen sensor will be permanently damaged. 
Spark-ignition models without catalytic converter
(the catalytic converter can be retrofitted)
The engine is designed to run on both unleaded and leaded fuel. Since the

26 Tyre pressures

You will find tyre pressure figures on the door column when you open the driver's door. Tyre pressures (gauge pressure) are stated in bar (psi) with tyres cold (cold = ambient temperature).

These tyre pressures apply to makes of tyre approved by BMW and known to BMW Service. If other makes of tyre are fitted to the car, higher tyre pressures may be needed.

When towing a trailer, always use the values for the higher load.

! Check tyre pressures – including the spare wheel – at regular intervals – at least twice a month and before setting out on any long journeys. Incorrect tyre pressures can adversely affect the car's roadholding and cause tyre damage, which could result in an accident. ▶

BMW model	Tyre size	max.	2	3	4
	215/65 R 16 98 V				
	235/60 R 16 100 W	2.0	2.3	2.3	2.8
	245/55 R 16 100 W	(28.5)	(32.7)	(32.7)	(39.8)
	235/50 ZR 18				
725tds, 728i/L	255/45 ZR 18	-	2.3	-	2.8
	215/65 R 16 98 Q,T,H M+S				
	235/60 R 16 100 Q,T,H M+S	2.2	2.5	2.5	3.0
	235/50 R 18 98 Q,T,H M+S	(31.3)	(35.6)	(35.6)	(42.7)
	245/55 R 16 100 Q,T,H M+S				
	235/60 R 16 100 W	2.1	2.4	2.5	3.0
	245/55 R 16 100 W	(29.8)	(34.1)	(35.6)	(42.7)
	235/50 ZR 18		2.3	2.6	2.7
735i/L, 740i/L	255/45 ZR 18		(32.7)	(37.0)	(38.4)
					(45.5)
	215/65 R 16 98 Q,T,H M+S				
	235/60 R 16 100 Q,T,H M+S	2.3	2.6	2.7	3.2
	235/50 R 18 98 Q,T,H M+S	(32.7)	(37.0)	(38.4)	(45.5)
	245/55 R 16 100 Q,T,H M+S				

BMW 735i/L, 740i/L:

If a speed of 200 km/h (124 mile/h) is not exceeded, the pressure of summer tyres may be reduced by 0.3 bar (4.3 psi) for extra ride comfort.

27 Tyre pressures

BMW model	Tyre size	max.	2	3	4
	235/60 R 16 100 W	2.2	2.6	2.5	3.0
	245/55 R 16 100 W	(31.3)	(37.0)	(35.6)	(42.7)
	235/50 ZR 18		2.4	2.8	2.7
		(34.1)	(39.8)	(38.4)	(45.5)
750i/L	255/45 ZR 18	-	2.6	-	3.0
	215/65 R 16 98 Q,T,H M+S				
	235/60 R 16 100 Q,T,H M+S	2.4	2.8	2.7	3.2
	235/50 R 18 98 Q,T,H M+S	(34.1)	(39.8)	(38.4)	(45.5)
	245/55 R 16 100 Q,T,H M+S				

BMW 750i/L:

If a speed of 200 km/h (124 mile/h) is not exceeded, the pressure of summer tyres may be reduced by 0.3 bar (4.3 psi) for extra ride comfort.

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Controls

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Operating

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Maintenance

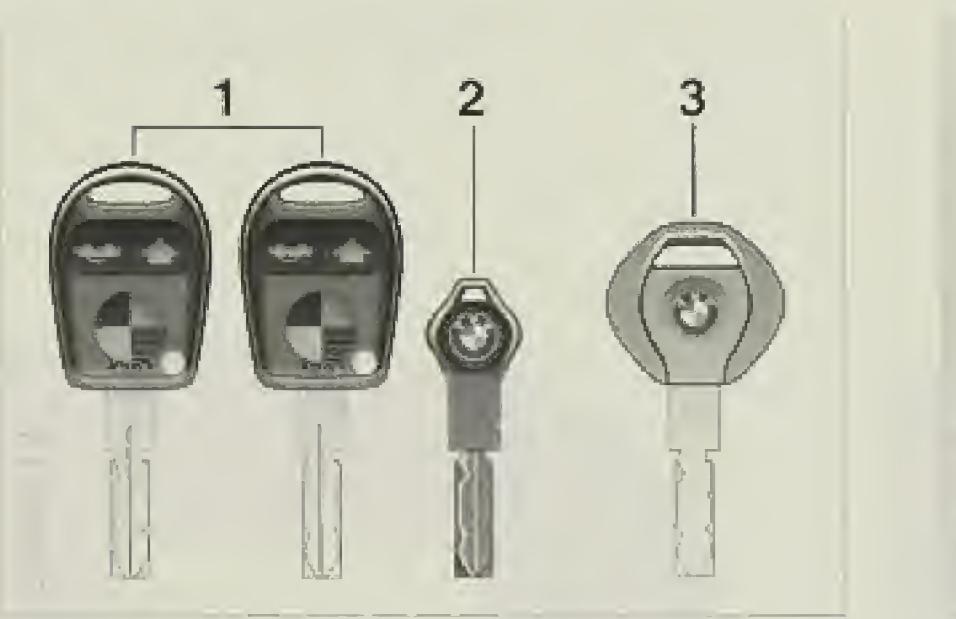
Technical data

Data

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Electronic immobiliser

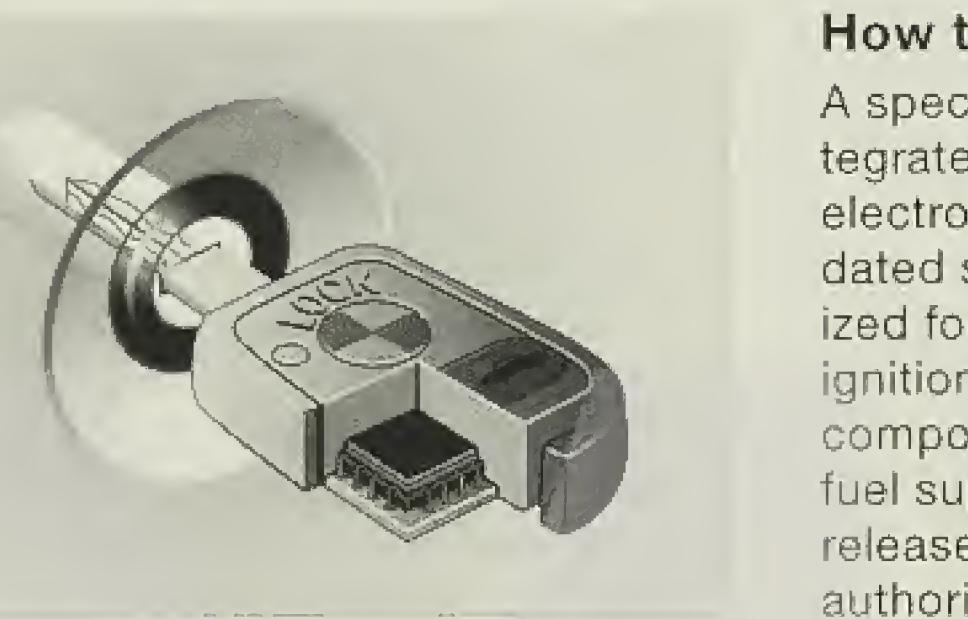


- 1 Master key with radio remote control transmitter.
- 2 Spare key to keep in a safe place, e.g. in a purse or wallet. This is a master key, but is not intended for regular use.
- 3 Key for doors and ignition.

With this key, you cannot open the locks on boot lid and glovebox – an advantage in places such as hotels

Replacement keys

A replacement key can only be obtained from your BMW Service point. BMW is obliged to check first whether you are entitled to obtain this key, which constitutes part of the overall security system (see the "Electronic immobiliser" section below).



The high-security key

The electronic immobiliser increases anti-theft protection on your BMW – without requiring you to adjust or activate anything. It prevents the engine from being started except with the car's correct keys.

BMW Service can also invalidate individual keys if they are lost, for example. If a key has been invalidated, it can no longer be used to start the engine.

How the electronics work

A special electronic component is integrated into the key. The vehicle's electronics exchange constantly updated signals, which are individualized for every vehicle, between the ignition switch and the electronic components in the key. The ignition, fuel supply and starter motor are only released once the key is identified as authorised.

► If force is applied, this can damage the electronics in the key. This could prevent you from starting the engine. ◀

Central locking system

The principle

The central locking becomes active when the driver's door is closed. Doors are unlocked and locked together.

- doors
- boot lid
- tank flap

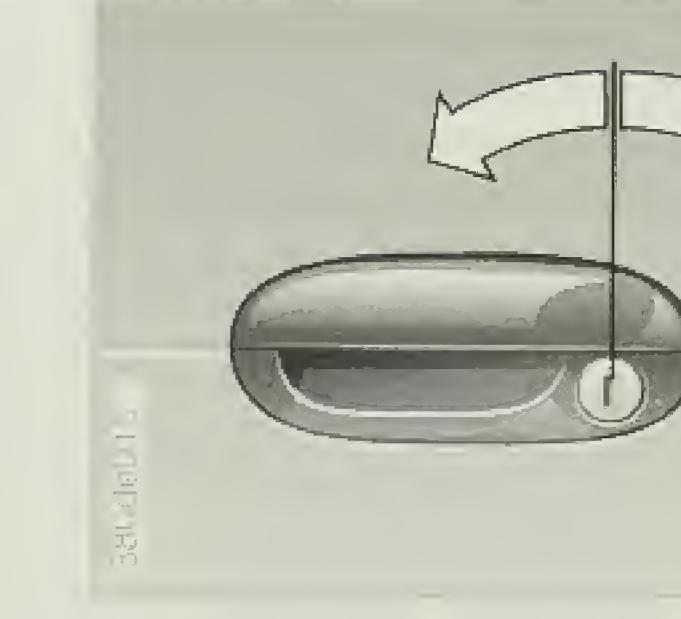
The central locking system can be operated

- from outside via the driver's door or boot lid lock and by radio remote control
- from inside using a button.

When operated from outside, the deadlock system is operated at the same time. It prevents the doors from being unlocked either at the safety lock buttons or door handles. The alarm system* is also activated or deactivated.

In the event of an accident, the central locking is automatically released and the doors can be opened unless they have been locked individually via the door lock catches. The hazard warning flashers and inside lights also come on.

Doors – from outside



Locking and unlocking

! Do not lock the car if people are seated in it, since they would be unable to unlock the doors from inside. ◀

► With some national versions, the alarm system can only be operated using the radio remote control unit. If the master key is used to unlock the car, the alarm will be triggered off on these cars.

To switch off the alarm: Press button 1 (unlock, refer to page 36) or switch on the engine. ◀

For further details of the alarm system, see page 39.

Convenience circuit

The electric windows and the sliding/tilt roof can also be operated via the door lock.

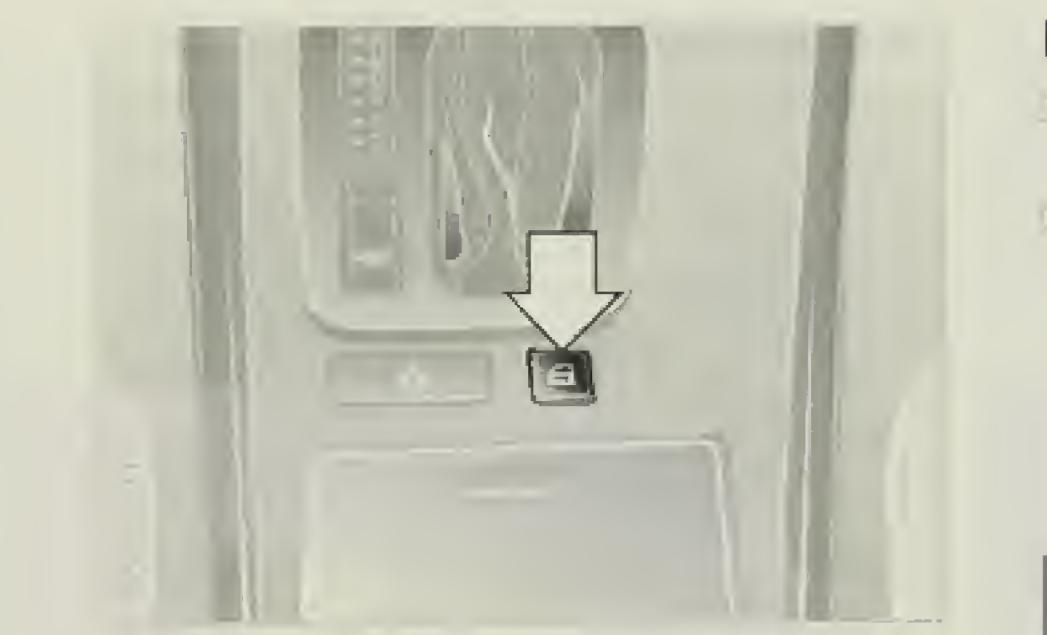
- To open: If the door is locked, secure the key in the "Unlock" position.
- To fasten: When the door is closed, hold the key in the "Lock" position.

Release the key to halt the movement.

Emergency operation

(in the event of an electrical malfunction)

The driver's door can be unlocked or locked by turning the key to the door lock's limit position.



This pushbutton operates the central locking system when the driver's door is closed. This unlocks or locks doors, boot lid and fuel tank flap, but does not connect them to a burglar alarm.

Unlocking and opening

Either unlock all doors at the central locking pushbutton and then operate the door handle above the armrest, or
Pull each inside door handle twice: the first time to unlock the door, the second time to open it.

Locking

- ▷ Either lock all doors at the central locking pushbutton, or
- ▷ Press the safety locking buttons on the doors down. When the driver's door is open, it cannot be locked by pushing down the safety lock button, to safeguard against being locked out of the car inadvertently.



Do not lock the car while in motion by means of the safety lock buttons, otherwise the doors will not unlock automatically in the event of an accident.

Note that children could lock the doors from the inside if they are alone in the car. Always take the keys with you so that the car can be unlocked again from the outside. ▶

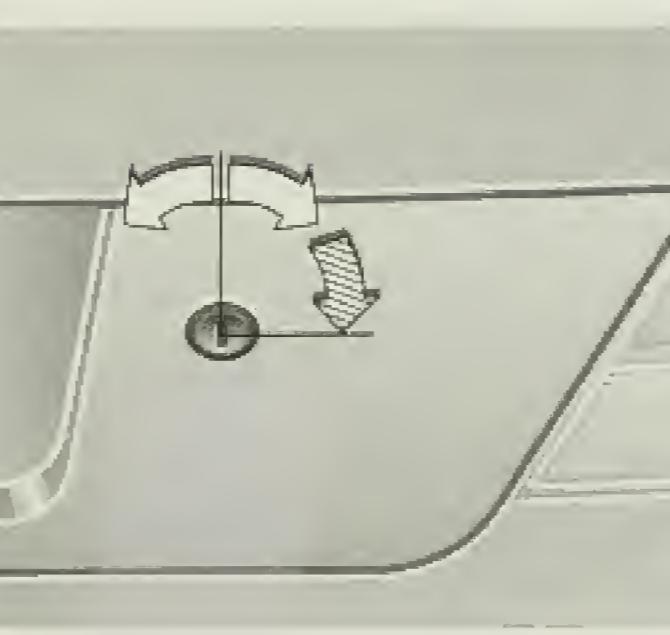
Childproof door locks



Insert the master key in the slot and turn outwards:

this door can now only be opened from the outside.

Boot lid



Only the central keys (refer to page 30) fit the boot lid lock.

Central locking system

Turned to left or right: When the driver's door is locked, doors, boot lid and fuel filler flap are locked or released.

Locking separately

- ▷ Turn the master key clockwise and remove it in the horizontal position.

This locks the boot lid and disconnects it from the central locking system. Nobody can gain access to the contents of the load area even if door and ignition key 3 is handed over to another person (see page 30). This is important for instance at a hotel.

Emergency operation

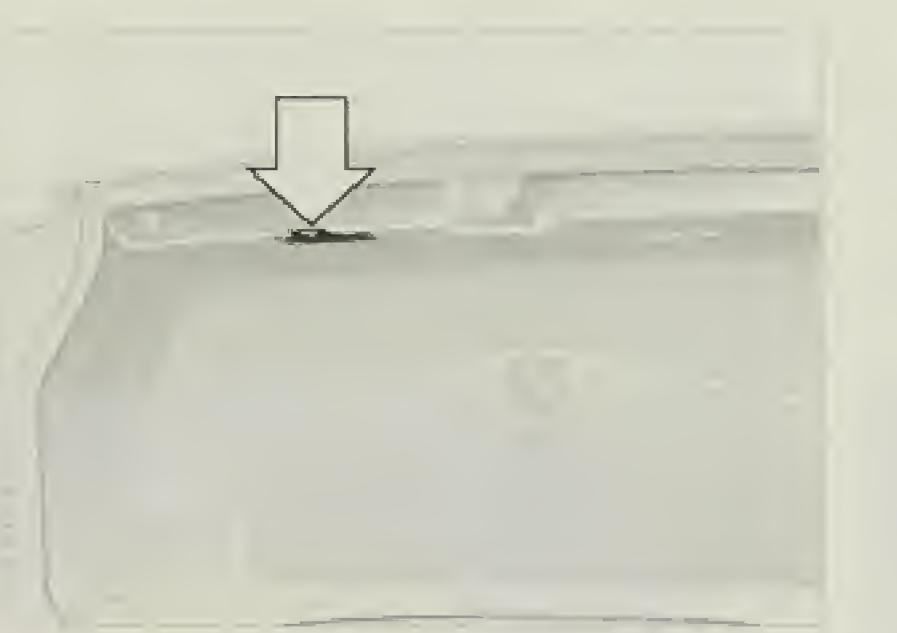
(in the event of an electrical malfunction)

Turn central key anti-clockwise as far as limit stop: the boot lid now opens.



Opening from inside the car

With this button you can open the boot lid while the vehicle is stationary, provided it is not locked.



To close

A recessed handle (arrow) next to the lock mechanism makes it easier to pull the lid down.

Automatic Soft-Close system

To lock the boot lid, simply press down on it gently. After a brief delay, the system activates the automatic closing process.

The opening process is also initially power-assisted.



It is possible to open it up to a speed of approx. 3 km/h (approx. 2 mph).◀

As with any locking process, please ensure that the closing range of the boot lid is unobstructed (childrens' hands).

Automatic boot lid actuation*

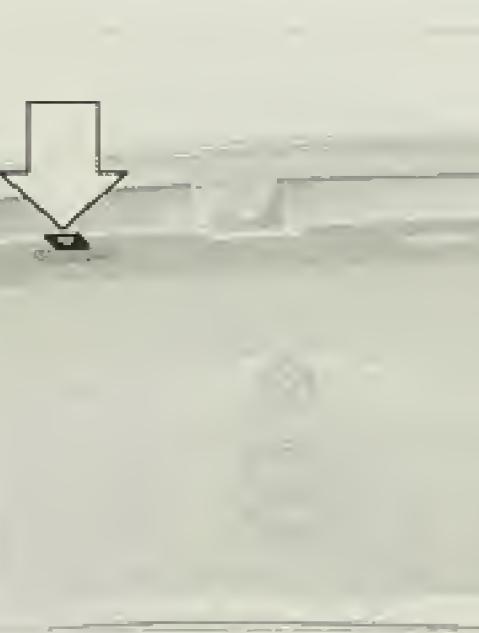
The boot lid opens completely if you press

- ▷ the button in the footwell
- ▷ the boot lid lock or
- ▷ button 4 on the remote control handset (refer to page 37).

The lid closed automatically if you press

- ▷ the boot lid lock or
- ▷ the button inside the boot lid (refer to page 35).

Pressing one of these buttons interrupts the opening or closing operation immediately.



To close

With this button, you can completely close the boot lid.

If you press it again, you interrupt the closing process. This also occurs if you hold down the lid.

If you press the button again (or the boot lid lock), the boot lid opens again.

Emergency operation

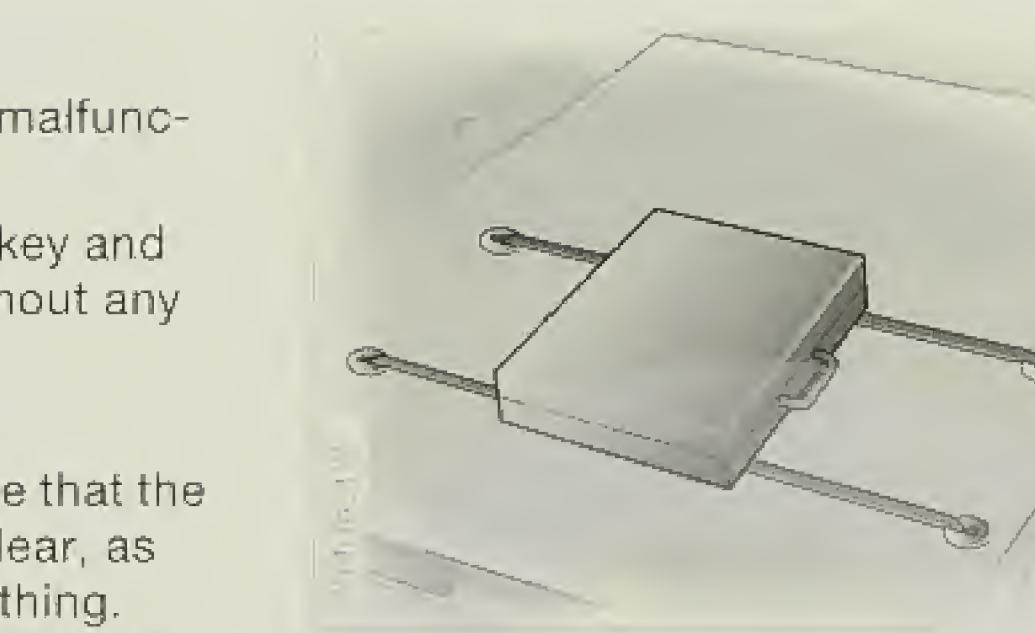
(in the event of an electrical malfunction)

Unlock the boot lid with the key and carefully open and close without any sudden movements.



To avoid injuries, ensure that the area around the boot lid is clear, as you would when closing anything. Drive only with the lid fully closed to prevent exhaust gases from entering the passenger compartment. If it is nevertheless necessary to travel with the lid open, observe the following precautions:

- Close all other windows and the sunroof
- Select a high airflow setting at the heating/ventilation controls or automatic air conditioning.◀



Tensioning straps

Use the tensioning straps on the floor of the load area to prevent fairly small objects from slipping.

If you place objects on the lashing straps, they form a non-slip base.

To secure the load area(s)* or lashing straps (used for securing items of luggage), you will find lashing eyes on the edges of the load area.

Also refer to "Loading", page 116.



Unlocking

Press button 1.

The anti-theft deadlocks are released, the alarm system* de-activated and the interior light switched on at the same time.

► In some national versions, only the driver's door is unlocked when the button is first pressed. When pressed for the second time, the rest of the central locking system is released.◀

Convenient opening

The electric windows and sliding/tilt roof can also be opened via the remote control:

Hold button 1 depressed. If the button is released, the opening movement is interrupted.◀

Locking and thiefproofing

Press button 2.

The anti-theft deadlock is simultaneously engaged and the alarm system activated.

⚠ Do not lock the car if people are seated in it, since they would be unable to unlock the doors from inside.◀

Convenient closure

Electrically operated windows and the sliding/tilt roof can also be closed with the remote control:

Hold button 2 depressed. If the button is released, the closing movement is immediately interrupted.

⚠ During the locking process, check that no-one's fingers are trapped. The closing procedure is interrupted as soon as the button is released.◀



Open trunk lid

Press button 4.

The boot lid opens slightly, regardless of whether it was locked or unlocked.

Switching off tilt alarm sensor

Briefly press button 2 again after locking the car.

The alarm system's radio movement detector (see page 40) is now also switched off.

► LED (light-emitting diode) 3 lights up briefly when you press each button.

Some of the symbols on the remote control buttons may vary from those illustrated here.◀

Master keys

The keys with remote-control transmitter are master keys.

The front passenger's door has no lock, in order to reduce the risk of theft.

► With some national versions, the alarm system can only be operated using the radio remote control unit. If the master key is used to unlock the car, the alarm will be triggered off on these cars.

To switch off the alarm: press button 1 (unlock) or start the engine.◀

⚠ Children left in the car could lock the doors from the inside. Always take the keys with you so that the car can be unlocked again from the outside if necessary.◀

Interference

The radio remote control may be susceptible to local interference from other systems or equipment operating on the same frequency.

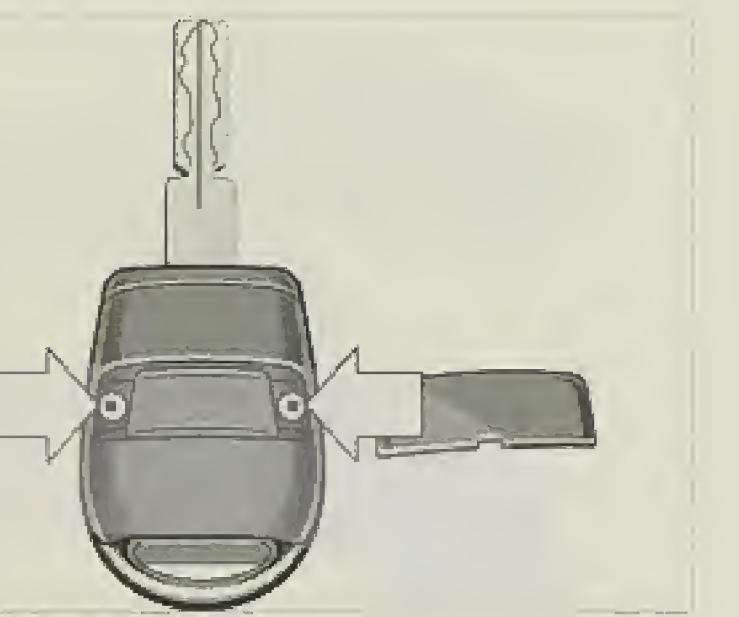


Batteries

Renew when the Check Control shows "Remote key battery". The LED no longer lights up when a button is being pressed and it is no longer possible to use the remote control.

Use only one battery of the type stated in the battery compartment (CR 2016) and make quite sure that it is installed in the correct position.

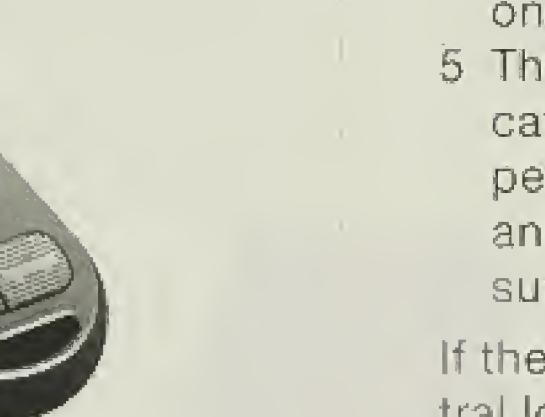
1 Using a screwdriver, fit the cover out at the recess (arrow).



2 Remove the two screws (arrows) and take off the cover.

The battery type and the correct installed position are marked on the base of the battery compartment.

Dispose of old batteries to an official collecting point or hand them back to BMW Service.◀



New transmitter

If you begin to operate a new remote control (a replacement or an additional transmitter), it must first be initialised:

- 1 Close lids/flaps and driver's door
- 2 Insert the ignition key into the steering lock, turn it briefly (max. 5 seconds) to position 1 and then back to position 0.
- 3 Take out the ignition key and press button 1 on the remote control (see illustration) and hold it down. Press button 2 three times in quick succession (within 10 seconds), while holding button 1 pressed in.

Protect transmitter from unauthorised use by only handing over your door and ignition key 3 or the spare key when staying in hotels etc.◀

- 4 Release button 1. LED 3 flashes slowly for a maximum of 10 seconds.
- 5 The central locking system indicates that initialisation has been performed successfully by closing and releasing the locks in rapid succession.

If the LED does not flash and the central locking system does not operate, the initialising procedure must be repeated.

If you use further remote control transmitters for this car, all of them (up to four) must be re-initialised within 30 seconds each. Do not alter the position of the ignition key while doing so.

In the event of faults, contact BMW Service, which can also supply replacement transmitters.

Protect transmitter from unauthorised use by only handing over your door and ignition key 3 or the spare key when staying in hotels etc.◀

Alarm system*

The alarm system reacts in response to:

- ▶ a door, engine bonnet or boot lid opening
- ▶ movement inside the car (radio interior movement detector)
- ▶ a change in the car's attitude, for instance if it is jacked up to remove a wheel or if it is towed away
- ▶ an interruption in the power supply from the battery.

It has three ways of indicating that the car has been tampered with:

- ▶ by sounding an alarm for 30 seconds
- ▶ by switching on the hazard warning flashers for five minutes*.
- ▶ by switching the low (dipped) headlights on and off in the same rhythm as the hazard warning flashers*.

Activating and de-activating

The alarm system is activated/de-activated respectively when the car is locked/unlocked using the locks or the remote radio control unit.

If the alarm system has been activated correctly, the hazard warning flashers come on once*.

You can open the boot lid using button 3 or the radio remote control while the system is activated. When closed, the lid is locked once again.



Alarm system telltale

- ▶ With some national versions, the alarm system can only be operated using the radio remote control unit. If the master key is used to unlock the car, the alarm will be triggered off on these cars.
- ▶ To switch off the alarm: press button 1 (unlock) or start the engine.◀

If the telltale light on top of the fascia flashes rapidly and continuously: the system is activated.

The telltale flashes when the system is being activated if the doors, engine bonnet or boot lid are not properly closed. Even if this situation remains uncorrected, the remaining (closed) items will be protected after 10 seconds and the telltale will flash intermittently. However, the radio interior movement detection system is not activated.

If the telltale goes out when the system is de-activated, your car has not in the meantime been tampered with.

40 Alarm system*

If the telltale flashes for 10 seconds when the system is de-activated, an attempt was made to tamper with the car.

After the alarm has stopped, the telltale once again flashes intermittently.

Tilt alarm sensor

The tilt alarm sensor and radio movement detector can be inactivated together. This prevents unwanted alarm signals being triggered off when the car is being carried on a train, for example:

Perform the locking (activating) procedure twice; i.e. press button 2 on the radio remote control twice in succession, or perform the locking operation with the key twice.

The telltale comes on briefly, then flashes continuously. The tilt alarm sensor and radio movement detector are now out of action until the entire system has been de-activated.



Radio interior movement detector

The picture shows the transmitter and receiver for the radio-operated interior movement detector.

For the radio interior movement detector to operate reliably, the windows must be closed, and also (if fitted) the sunroof.

However, switch off the radio movement detector if

- children or animals remain in the car
- a window or the sunroof is to remain open.

Seat adjustment

For your own personal safety, please note the following precautions when adjusting the seat position:

! Do not adjust the driver's seat while the vehicle is in motion. Any unexpected seat movement could result in you losing control of the car, and cause an accident.

The safety belt should pass closely across the wearer's body. This is to prevent the lap strap of the safety belt from slipping over the hips in a frontal crash and possibly injuring the abdominal area of the wearer's body. The protective action is also delayed if the belt is loose or slips in this way. Do not recline the seat back too far when the car is being driven (this applies in particular to the front passenger), or there will be a risk of submarining under the safety belt, which will then be unable to protect the wearer.

Do not slide the seats to the rear if the car is inclined at an angle (for instance a garage ramp or a slope). This could lead to the automatic safety belt height adjuster becoming disconnected. ▲

Manual seat adjustment



1 Forward/back:

Pull the lever up and slide the seat to the preferred position.

After releasing the lever, slide the seat backwards or forwards very slightly until it engages correctly.

2 Height:

Pull the lever up and press down on the seat or allow it to rise by taking your weight off it.



3 Seat back:

Pull the lever and either apply your weight to the seat back, or lean forward to relieve it of load.

4 Seat angle (driver's seat only): Pull the lever up and move the seat to the desired angle.

42 Manual seat adjustment

To relieve the load on the discs of the spine, sit well back in the seat with your back resting firmly against the seat back.

The ideal position is when the head is a straight-line extension of the spinal column.

On longer journeys, the seat back angle can be inclined slightly more, to reduce the strain on the body muscles. You should still be able to reach the highest point on the steering wheel with the arms slightly bent.

Lumbar support*

See BMW Comfort seat, page 43.



Head restraints

To adjust height: pull out or push in.

To adjust angle: swing forwards or back.



Headrests reduce the risk of neck and spinal injuries in the event of an accident.

Position the headrest so that its mid-point is at about ear height. ▲

Electrically adjusted seat*



1 Angle

2 Forward-and-back adjustment

3 Height

4 Seat back

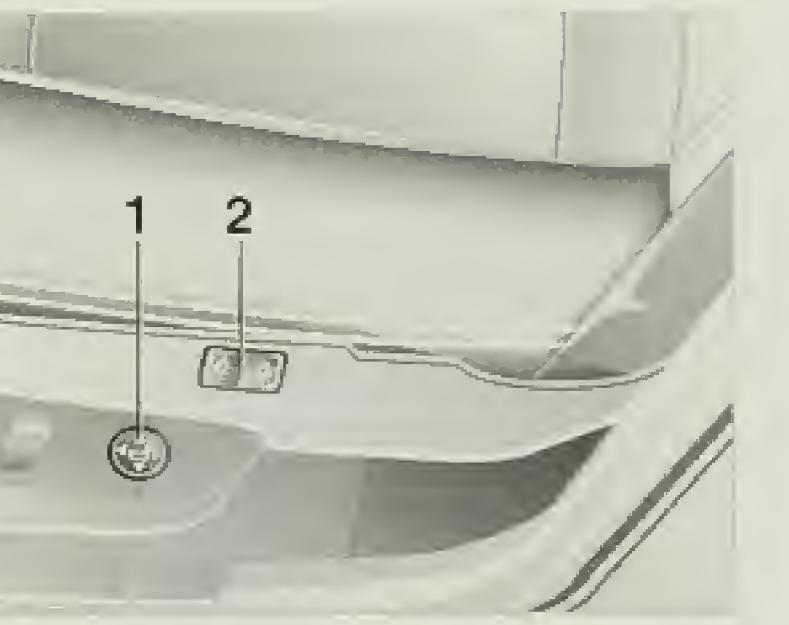
5 Head restraint height

Tilt the head restraint to alter its angle.



For your personal safety, please read the adjustment instructions on page 41. ▲

BMW Comfort seat*



This seat also offers you scope for adjusting the

1 Lumbar support

2 Shoulder support

Lumbar support

Push the switch forward or back to increase or reduce the curvature of the support.

Press the switch at top or bottom: curvature moves up or down.

The seat back contour can be altered to provide more support to the curved (lumbar) section of the spine.

The upper edge of the pelvis and the spinal column are supported, to encourage an upright but relaxed seated position.



Shoulder support

Press the switch: the angle of the upper part of the seat back changes.

The adjustable upper section of the seat back supports the shoulder area of the seat occupant's body. It enables a relaxed seat position to be found and reduces the load on the shoulder muscles.

To obtain the recommended optimum settings:

Driver and front passenger:

1 Move the upper section of the seat back fully to the rear

2 Select the optimum seat position as described on page 41

3 Tilt the upper section of the seat back forwards until adequate shoulder support is obtained.

Rest position for front passenger:

1 Move the upper section of the seat back fully to the rear

2 Increase the seat's angle of inclination slightly

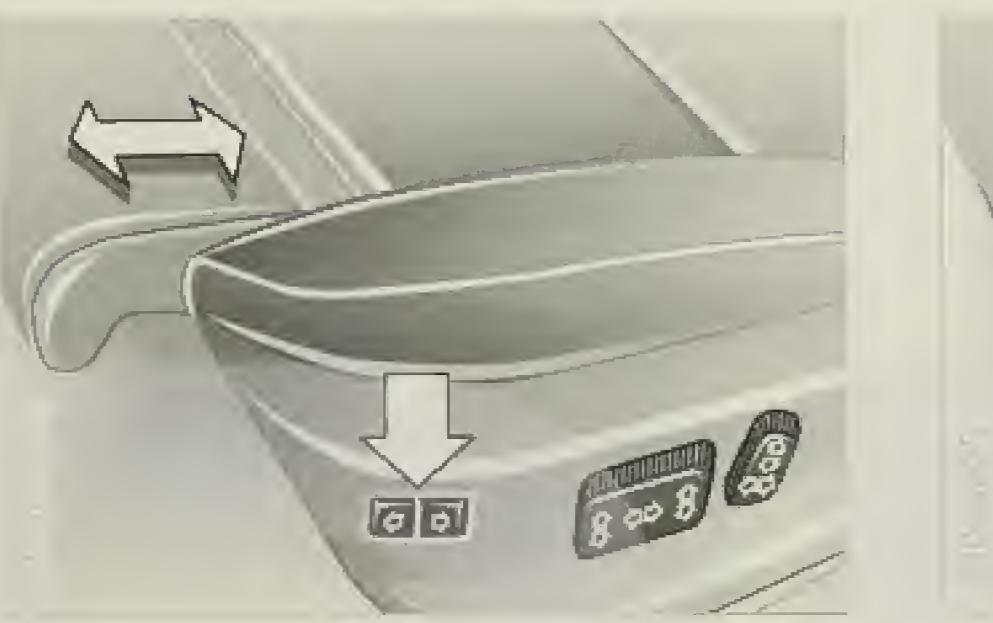
3 Increase seatback angle of inclination

4 Tilt the upper section of the seat back further forwards



Correct the longitudinal adjustment of the seat to ensure that the safety belt makes contact with the body, otherwise the safety action of the belt can be impaired. ▲

BMW Contour seat*



Compared with the seat with electric position adjustment, there is scope for adjusting the thigh support, shoulder support and lumbar support.

Thigh support

To adjust, press the switch (arrow).

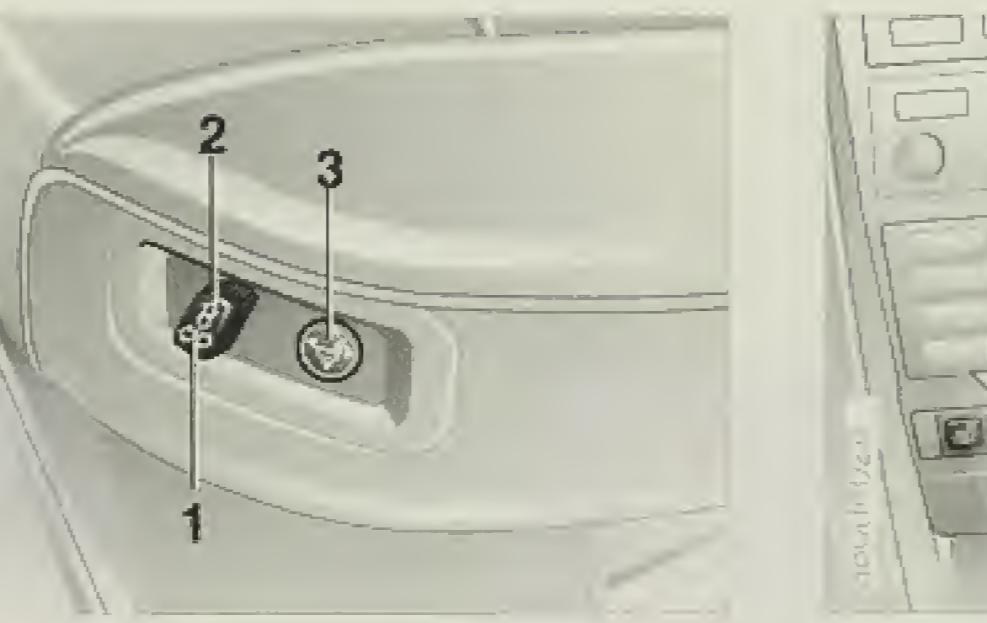
Shoulder support

See BMW Comfort seat on previous page.

Lumbar support

See BMW Comfort seat on previous page.

Adjusting rear seat*

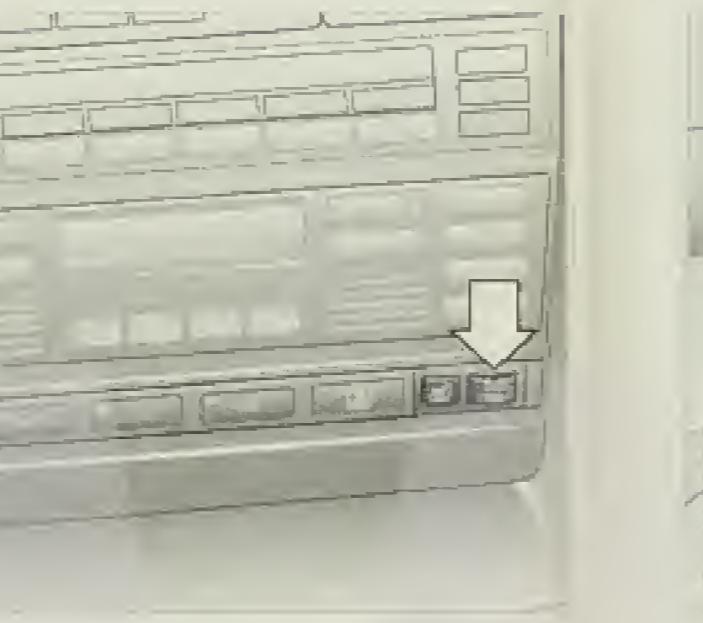


- 1 Seat back
- 2 Head restraint height
- 3 Lumbar support

When a rear passenger fastens the safety belt, the corresponding head restraint is automatically extended. Correct head restraint height with switch 2.

For lumbar support, see BMW Comfort seat on previous page.

Heated seats*



The seat cushion and seat back can be heated when the ignition key is in position 2.

To switch on and off, press the button. When the seat heating is switched on, the green telltale light in the switch is on. Adjust to the desired temperature at the knurled wheel; the seat heating is governed by a thermostat control.

- Minimum temperature
- Maximum temperature

Rear-seat heating*

The switches are located at the end of the centre console, under the ventilation grilles.

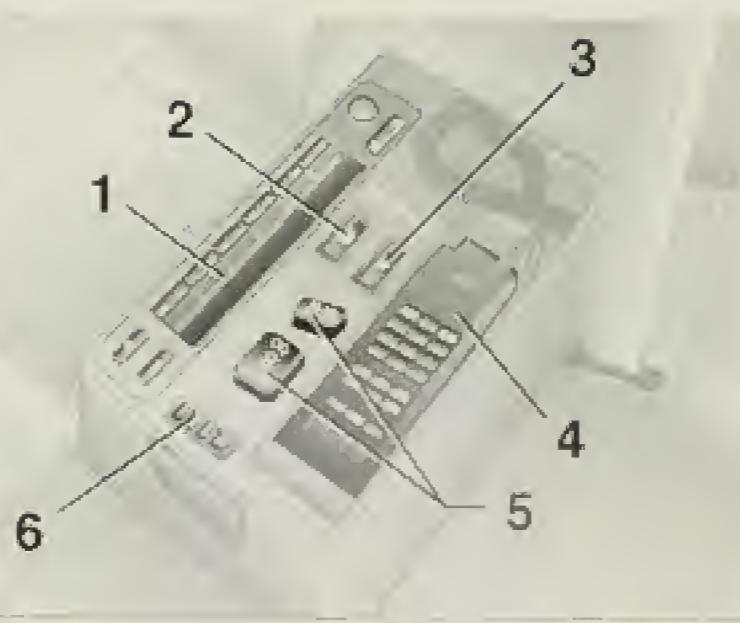
Centre armrests



Rear armrest

Pull out at the loop when required.

To open the storage compartment, lift the catch (arrow).



- 3 Shoulder support, passenger side
- 4 Tandem telephone (D network)
- 5 Electric position adjustment, front passenger's seat
- 6 Front passenger's seat position memory



Front armrest*

To move forwards or back, press the front button (arrow 1).

Oddments trays*:

To open, press buttons on side (arrows 2).

Adjusting steering wheel

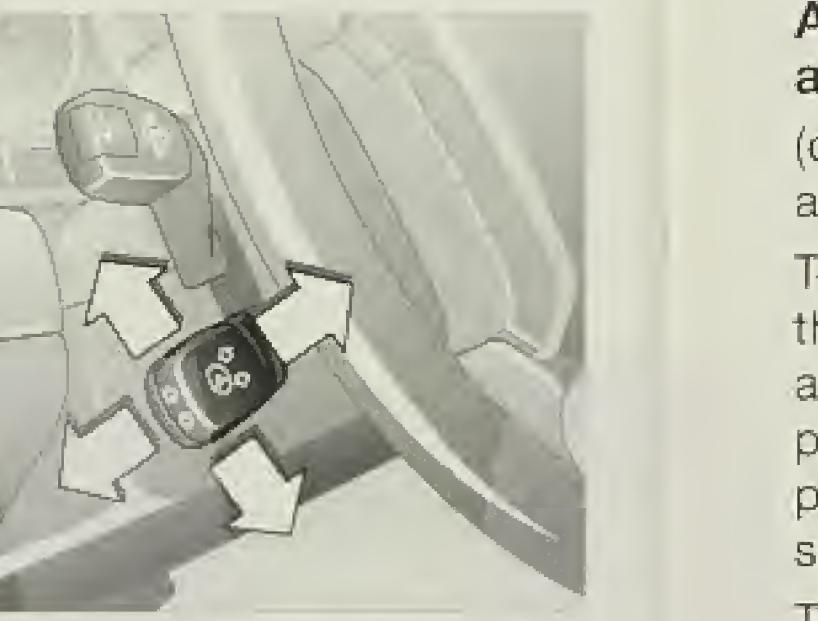


Manual

- 1 Fold out the clamp lever.
- 2 Push or pull the steering wheel until the desired reach position is obtained.
- 3 Fold the lever back in to clamp the steering column in the new position.



Do not adjust steering wheel while vehicle is in motion, otherwise an accident could result from any unexpected movement.◀



Electrical*

The steering wheel can be repositioned in four directions, corresponding to the lever movements.



Do not adjust steering wheel while vehicle is in motion, otherwise an accident could result from any unexpected movement.◀

Memorizing the steering wheel position, see Seat, mirror and steering wheel position memory, page 50.

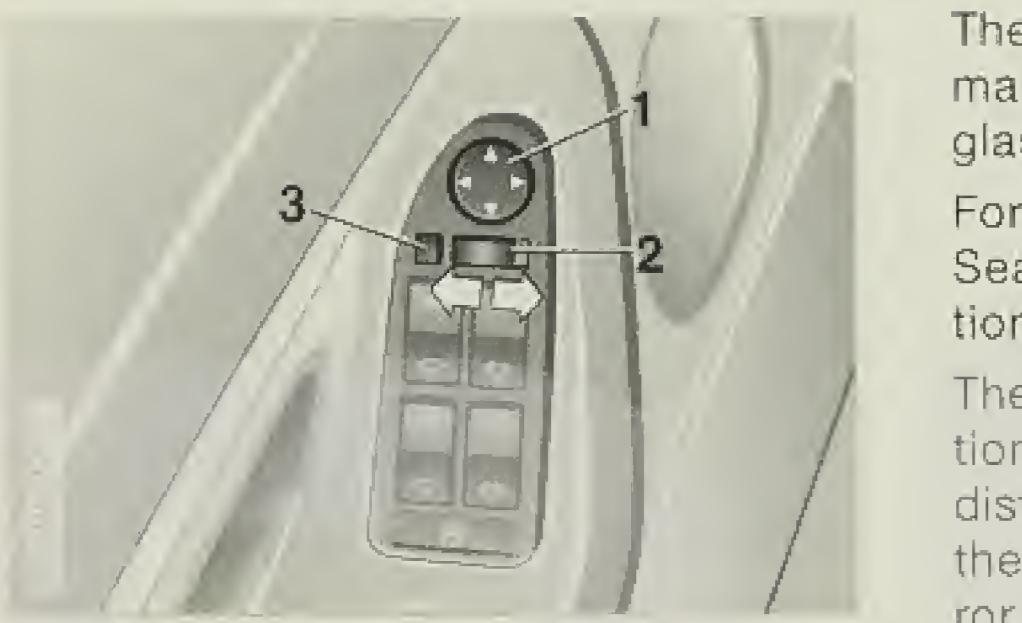
Adjusting steering wheel

Automatic steering wheel adjustment

(only in conjunction with seat, mirror and steering wheel memory*)

To make it easier to get in and out of the driver's seat, the steering wheel automatically rises into its uppermost position, then returns to the driver's position (memory) once you are seated.

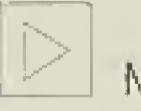
This automatic system responds to the ignition key setting and the driver's door.



Outside mirrors

- 1 Switch for adjustment in four directions
- 2 Changeover switch for mirror on other side of car
- 3 Switch to fold mirrors in and out (only in conjunction with mirror package* – see overleaf).

Each time this switch is pressed, the mirrors are folded either in or out; this function is useful for example in car washes or narrow streets, or for moving mirrors back into position if they have been inadvertently knocked.

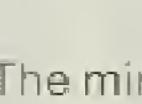


Mirrors can only be folded in up to a road speed of 10 km/h (approx. 6 mph). ▶

The mirrors can also be adjusted manually by pressing the edge of the glass.

For memorizing mirror positions, see Seat, mirror and steering wheel position memory, page 50.

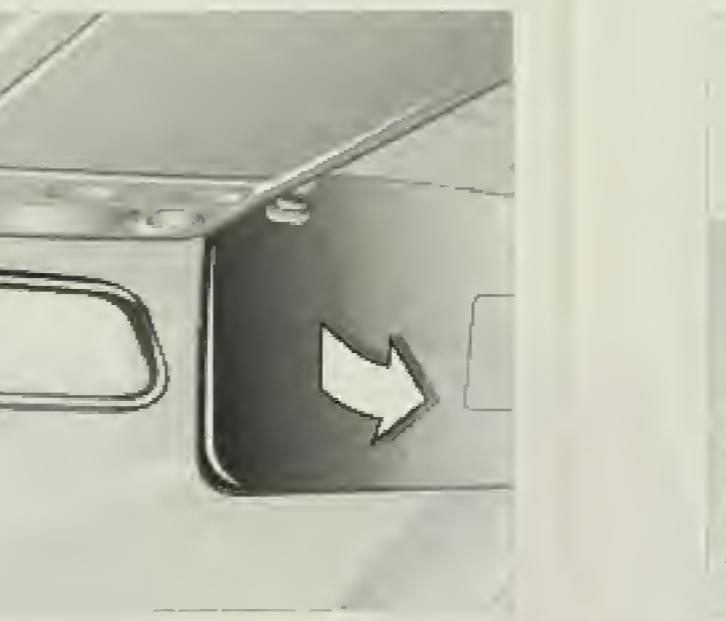
The outer, aspherically curved* section of the mirror provides a slightly distorted but wider field of view than the inner, convex* section of the mirror. In this way, the view to the rear is extended and the blind spot, as it is known, is reduced in size.



The mirror on the passenger side is convex and therefore reflected objects are closer than they appear. It can be difficult to estimate the precise distance at which another vehicle is following your car. This also applies to the outer part of the aspherical wide-angle mirror. ▶

Electric mirror heating

Both mirrors are heated automatically in ignition key position 2, depending on outside temperature.



Inside mirror

To reduce glare from the headlights of following vehicles after dark, move the small lever to tilt the mirror.

Make-up mirrors

Fold the sun visor down and slide the mirror cover (if fitted) sideways.

The mirrors are illuminated from ignition key position 1 on.

Sun visors

The sun visors can also be pivoted to the side, against the door windows.



Interior mirror, automatic dip*

This mirror dims automatically and steplessly in accordance with the intensity of the light received (ambient light and the effect of glare from headlights).

The mirror switches automatically to the clear, non-dimmed position when the driver engages reverse gear or selects R.

To ensure that the mirror always functions correctly, keep the two photo-cells clean and unobstructed. One cell is in the mirror glass and the other is slightly offset behind the mirror. An electronic regulating system compares the light intensities at the front and rear. The difference between them

generates an electrical voltage which is applied to a gel coating on the mirror glass.

The gel reacts chemically to the electrical voltage and gradually darkens the mirror (electrochromic principle).

The driver no longer has to reset the mirror to avoid dazzle, and can concentrate fully on the road and traffic situation.

The mirror will not operate reliably unless the photo-electric cells are kept clean and are not obstructed.

Mirror package*

Both outside mirrors fold automatically and continuously. In addition, you can fold the mirrors in and out with button 3 (refer to previous page).



Three different seat, outside mirror and steering wheel positions (only in conjunction with electric steering wheel adjustment) can be memorized and called up.

 The memory does not store the setting for the lumbar support. ◀

Memorizing

- 1 Ignition key in position 1 or 2
- 2 Select the desired seat, outside mirror and steering wheel positions
- 3 Press the MEMORY button; the telltale light in the switch comes on
- 4 Press memory button 1, 2 or 3 as required; the telltale light goes out.

Recall

Driver's door open after being unlocked, or ignition key in position 1:

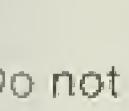
- Briefly press desired button 1, 2 or 3.

The positioning movement is interrupted immediately if you operate a seat adjustment switch or one of the memory buttons.

With the driver's door closed and the ignition key either removed or in position 0 or 2:

Hold the desired memory button 1, 2 or 3 depressed until the adjusting procedure has been completed.

If the MEMORY button was pressed accidentally: press it again; the telltale goes out.



Do not call up memory while the car is moving, otherwise there is a risk of the seat or steering wheel moving in an unexpected manner. ◀



Passenger's side mirror tilt-down

(Parking position)

1 Set the mirror changeover switch (arrow) to the "driver's door mirror" position.

2 When reverse gear (or automatic transmission selector lever position R) is selected, the mirror on the passenger's side will tilt down slightly to display the ground along the side of the car (for instance the edge of the kerb).

This automatic function can be switched off if not required: move the mirror changeover switch to the "passenger's mirror" position.



For your own safety, please note the following instructions about putting on the safety belt, otherwise its protective function may be impaired. Make sure that other persons traveling with you also observe these points:

Never restrain more than one person with each safety belt. Babies or small children must not travel on the lap of another occupant.

The belts should not be twisted and must run firmly across the pelvis and shoulder. They should not pass over hard or fragile objects in your pockets. The safety belt must not pass across the neck, become trapped at any point or chafe against any sharp edges.

The belt should be as close to the body as possible, therefore avoid wearing thick and heavy clothing. Take up slack regularly by pulling up the belt at the shoulder. In the event of a head-on collision, the lap belt could otherwise slide over the hips and injure the lower part of the body. Furthermore, if the slack is too great, the restraint effect on the body does not take effect soon enough.

Pregnant women should also wear the safety belt, making sure that the lap strap is well down on the hips and does not press on the abdominal region of the body.

Do not modify the belt system in any way. ◀

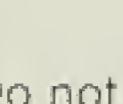
For care of belts, see page 176.

52 Child restraint systems*

For children up to 12 years of age and less than 150 cm (approx. 4 ft 11 in) tall, suitable approved restraint systems may have to be installed; comply with local regulations.

Small children up to about 18 months old can be secured with a rear-facing restraint system on the back seats, using standard safety belts.

BMW Service can supply suitable child restraint systems for every age group. Please comply with the notes in the installation instructions when using these products.



Do not use child restraint systems on the front passenger side, otherwise injuries might result when the airbag is triggered.

In no circumstances are child restraint systems to be modified, as their protective effect may otherwise be impaired. ▶

Child restraint function

To attach and secure a child restraint system, the centre rear safety belt is lockable in the desired position.

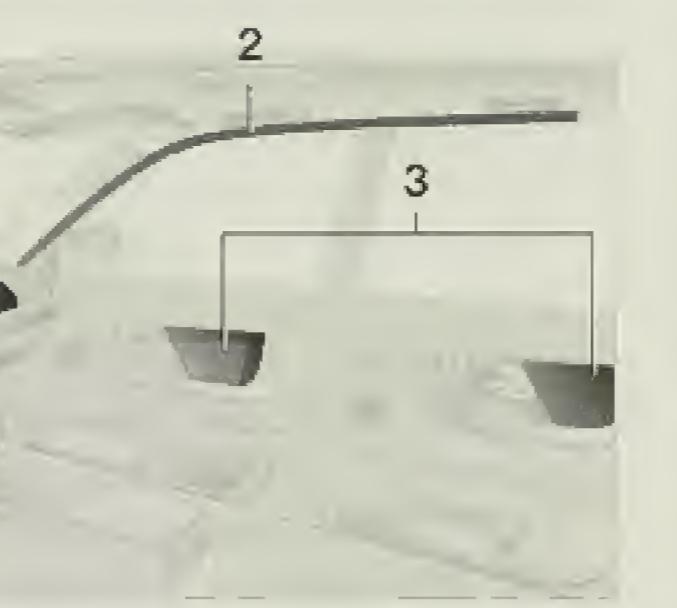
To lock the belt

Pull the safety belt completely out of the automatic reel. Allow the belt to retract partly, secure the child's seat with it, tauten the belt and fasten it at the buckle.

To release the lock

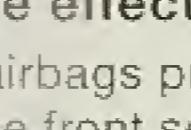
Unfasten the safety belt, take the child's seat out and allow the belt to retract fully into the automatic reel.

Airbags



The picture shows the directions of impact to which the airbags respond in the event of a collision.

Telltale light

 The telltale confirms that the system is operational from Ignition key position 1 onwards.

System operational:

- the telltale light comes on briefly and then goes out.

System defective:

- the telltale light does not come on.
- the telltale comes on briefly, goes out briefly and then comes on again.

If there is a system fault, there is a risk that it will not be triggered off even if a sufficiently severe accident occurs within the airbag range.

Please have it checked by BMW Service without delay.

 The airbag telltale also lights up when the seat belt lock test zones are activated. ▶

 For your own safety, please note the following precautions concerning airbags in order to ensure that their full protective function is not lost. Make sure that other persons travelling with you also observe these points:

Always wear your safety belt on every journey. The airbags are additional safety devices, and must not be regarded as an alternative to wearing the safety belt. They are not triggered in less severe collisions, rollover accidents or rear-end collisions, in which event protection is afforded by the safety belt only. Here only the safety belt can protect you.

Your seated position should be as far as convenient from the steering wheel, fascia and door.

Always hold the steering wheel by its rim, or else injuries could be caused to the hands and arms if the airbag is triggered off.

No objects should be held or allowed to rest between the airbag and the seat occupant's body.

The cover of the front passenger's airbag should not be used as a storage tray. The padded covers on the steering wheel, instrument panel, side trim panels on doors and roof struts, and in the sides of the headliners, must never be cemented, covered or otherwise modified or treated, otherwise the airbags may fail to operate in the intended manner.

Never install child restraint systems on the front passenger's seat. Children younger than 12 and children smaller than 150 cm (approx. 4 ft 11 in) must always travel in the back seat.

Ensure that child seats on the back seat are correctly mounted at the greatest possible distance from the door. Do not allow children to lean out of the seat towards the door, as this could result in considerable injury in the event of the airbags being triggered.◀

Even if all instructions are followed, depending on the circumstances of a given incident, it is always possible for the airbag to cause injuries to face, hands and arms when triggered. Occupants with sensitive hearing may be subject to brief, temporary impaired hearing caused by the ignition and inflation noise.

What happens when the system is triggered off?

Retardation sensors continuously monitor the acceleration forces acting on the car. If a frontal impact causes the rate of retardation to reach a level at which the safety belts alone would not provide sufficient occupant protection, the gas generators for the driver's and front passenger's airbags are also ignited. However, the passenger's side airbag is not triggered unless a further sensor detects that the front passenger seat is occupied.

In the event of a side-on collision, the head and side airbags may be triggered.

The airbags under the covers in steering wheel, instrument panel, roof struts and sides of headliner and under the door side panels are inflated by the resultant gas within a few milliseconds, causing them to inflate. They break through the pre-formed dividing lines in the padded covers or press these outwards.

In view of the very brief system response time, the noise of propellant ignition and inflation is lost in the general accident situation. The gas which is required for inflating the airbags and the visible smoke which is generated in the process do not represent a health hazard and are rapidly dissipated.

The entire process takes place within only one-twentieth of a second.

Airbag safety instructions

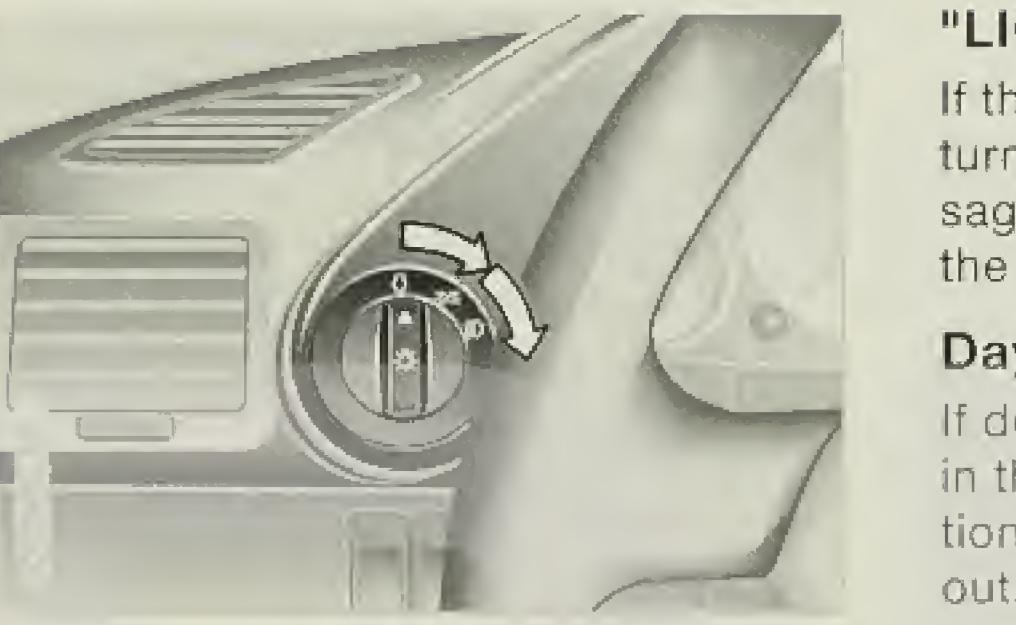
 The gas generator on the airbag restraint system must not be removed from the car. Any testing and assembly work on it may only be carried out by specially trained personnel.

If the airbag restraint system develops a fault, is inactivated or is triggered off as intended in an accident, the necessary repair or dismantling work must be entrusted to a BMW Service station.

No modifications to individual components or to the wiring should be attempted. This includes the padded sections of steering wheel, instrument panel, door side trim panels and roof struts as well as in the sides of the headliner. These covers must not be cemented, covered or otherwise modified or treated. The steering wheel itself must not be dismantled.

In order to comply with valid safety regulations, the airbag generator must only be scrapped by BMW Service. Any careless or unskilled interference with the system could lead to its failure or to accidental triggering off with the risk of injury.◀

56 Side/parking lights



Side lights



Low beam/xenon headlights*



If the ignition is switched off while the dipped headlights are in use, only the side lights remain on.

Xenon headlights*

For further details, see page 152.

Beam throw adjustment*



To avoid dazzling oncoming traffic, the vertical aim of the low-beam headlight must be adjusted to suit the load carried by the car:

Values in () apply when towing a trailer.

0 (1) =	1 - 2 persons, no luggage
1 (1) =	5 persons, without luggage
1 (2) =	5 persons, with luggage
2 (2) =	1 person, luggage compartment full

Beam throw adjustment*

Cars with self-levelling suspension*: All load conditions: position 0. Exception: 1 person, luggage compartment full and with a trailer being towed: position 1. Comply with permitted rear axle load, refer to page 184.



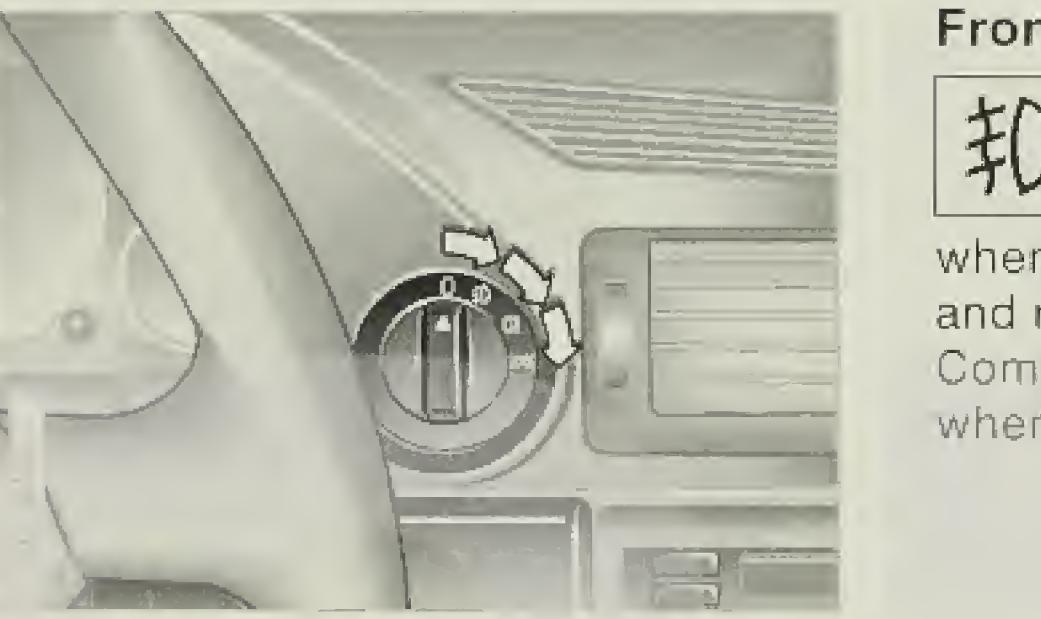
Note these settings, otherwise oncoming traffic will be dazzled.◀

Cars with xenon lights* have automatic headlight beam throw adjustment.

Instrument lighting



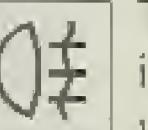
Turn the knurled wheel to vary the intensity of the lighting.



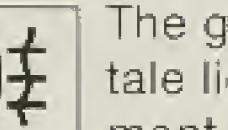
Fog lights

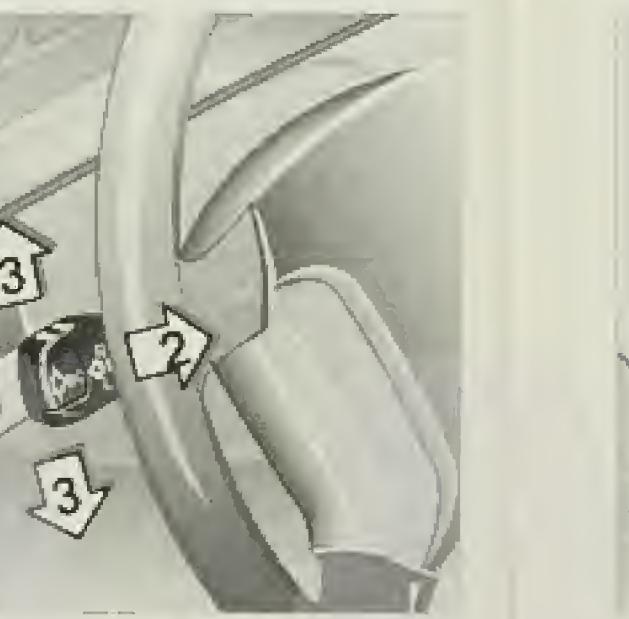
 The green telltale light on the instrument panel comes on when the fog lights are in use.

Rear fog lights*

 The yellow telltale light on the instrument panel comes on when the rear fog lights are in use.

Front and rear fog lights*

 The green and yellow telltale lights in the instrument cluster come on when the lights up when the fog lights and rear fog lights are switched on. Comply with legislative requirements when using fog lights.



- 1 High headlight beams (blue telltale light)
- 2 Headlight flasher
- 3 Turn indicator repeater (green telltale light, flasher relay ticks rhythmically).

If the repeater light flashes and the relay ticks faster than usual, one of the car's flashing turn indicators has failed. If a trailer is being towed, the failed flashing turn indicator may be on the trailer.

To indicate a turn briefly

Move the lever lightly, only as far as the first detent.

Right or left parking lights

In ignition key position 0, press the lever in the desired direction from its rest position until it reaches a final detent and is retained there.



The pushbutton lights up in a regular rhythm when the hazard warning flashers are operating.

The pushbutton is illuminated when the car's outside lights are on.

 The turn signal function has priority over the hazard warning lights. For this reason, from ignition key setting 1, you are able to operate the turn signals, even if the hazard warning lights are switched on.◀



The interior lights are controlled automatically.

Switching interior light on and off manually

Press the button (arrow) briefly.

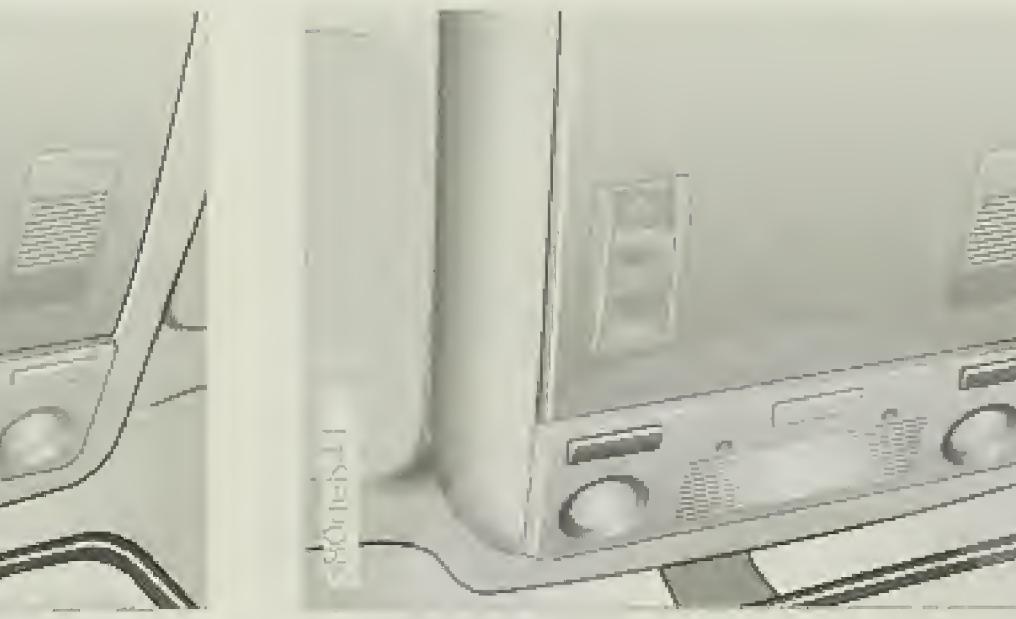
To switch off the light permanently, hold the button depressed for about 3 seconds.

To restore to use, touch the button briefly.

There are locating lights to the left and right of the interior light switch which come on when the parking or main outside lights are switched on. They go out when the car's lights are switched off.

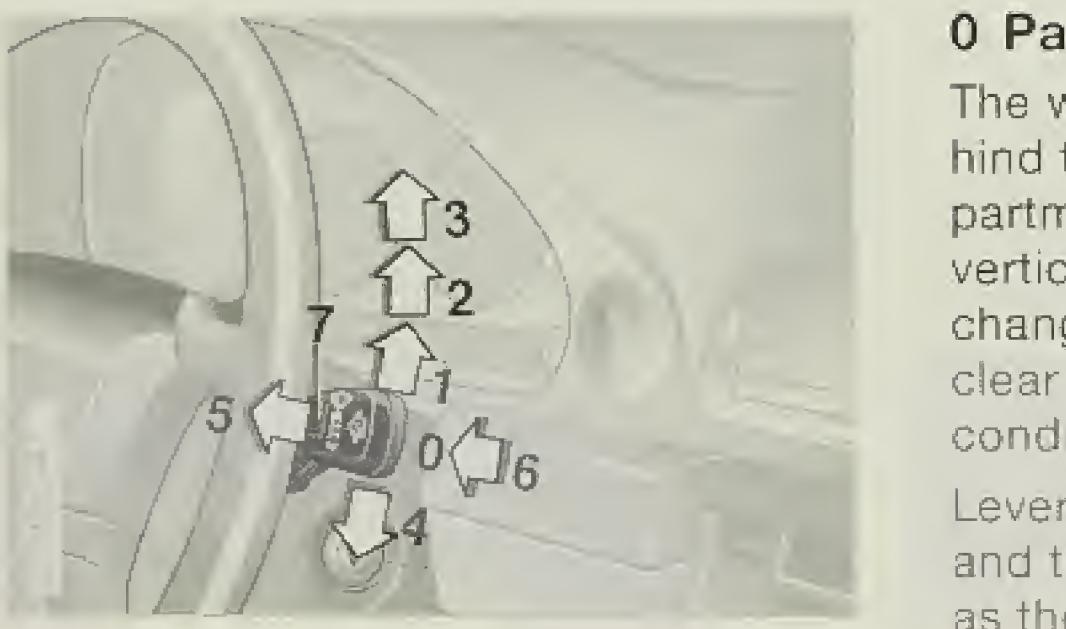
Footwell lights

The footwell lights operate in the same way as the interior light.



There are reading lights at the front next to the interior light and in the rear passenger area. They can be turned on and off at the adjacent switch.

 To protect the battery, all lights in the car are switched off about 1.5 minutes after the ignition key is moved into setting 0.◀



- 0 Parked position of wipers
- 1 Intermittent wipe setting or rain sensor*
- 2 Normal wiper speed
- 3 Fast wiper speed
- 4 Flick wipe
- 5 Automatic windscreen wash
- 6 Automatic intensive cleaning*
- 7 Knurled wheel to vary intermittent-wipe interval or sensitivity of rain sensor.

0 Parked position of wipers

The wipers are partly concealed behind the rear edge of the engine compartment lid. To move the wipers to a vertical position (for instance when changing a wiper blade or to lift them clear of the windscreen in freezing conditions):

Lever position 1 should be selected and the ignition switched off as soon as the wipers reach the parked position.

When equipped with a rain sensor:
switch on the wiper (lever settings 1, 2 or also 4)
when the wipers are roughly vertical, switch off the ignition.

! Fold the wipers against the window before turning the ignition key back into setting 1 or 2.◀

To activate the rain sensor:
From ignition key setting 1, switch to lever setting 1. The wipers move once across the windscreen each time.

1 Intermittent wipe setting or rain sensor*

Intermittent wipe:

With knurled wheel 7 you can select four intermittent wipe intervals. This is also varied automatically depending on your road speed.

Rain sensor:

When the rain sensor is activated, the wipers are controlled automatically, depending on how wet the windscreen is (this also works in snow). You do not need to worry about switching the wipers on and off anywhere between intermittent wipe and continuous wipe and can instead dedicate your full attention to road and traffic conditions. This advantage is particularly important in adverse weather conditions.

2 Normal wiper speed

When the car comes to a standstill, the wipers switch automatically to the intermittent-wipe setting (not on cars with rain sensor).

3 Fast wiper speed

When the car comes to a standstill, the wipers continue to operate, but at normal speed (not on cars with rain sensor).

Wipers

You can then leave the lever constantly in position 1, then all you need to do is to activate the rain sensor from ignition key setting 1. To do this

- ▶ turn knurled wheel 7 briefly or
- ▶ use the automatic windscreen cleaning unit 5 or the intensive cleaning unit 6.

! Switch off the rain sensor in car washes otherwise damage may be caused by accidental wiper action.◀

4 Flick wipe

Same as 5, but intensive cleaning fluid is first sprayed on to the windscreen.

Changing the wiper blades: see page 150.

5 Automatic windscreen wash/wipe

Fluid from the washer tank is sprayed on to the windscreen and the wipers are operated for a short time.

If you only pull briefly, washer fluid is sprayed onto the windscreen without the wipers being switched on.

6 Automatic intensive cleaning*

Same as 5, but intensive cleaning fluid is first sprayed on to the windscreen.

Do not run the washer systems if the fluid reservoirs are empty, or else the washer pump will be damaged.◀

7 Knurled wheel to vary intermittent-wipe interval or sensitivity of rain sensor.

Headlight clearing*

If the headlights are switched on, they are automatically cleared as well on each fifth occasion that the windscreen wiper or intensive cleaning system is operated.

! Only use the washer systems if there is no risk of fluid freezing on the windscreen and obscuring the driver's view. Use an antifreeze in the washer, see page 136.

Do not run the washer systems if the fluid reservoirs are empty, or else the washer pump will be damaged.◀

Windscreen washer jets

The windscreen washer jets and the wiper rest area on the windscreen are automatically heated in ignition key position 2.

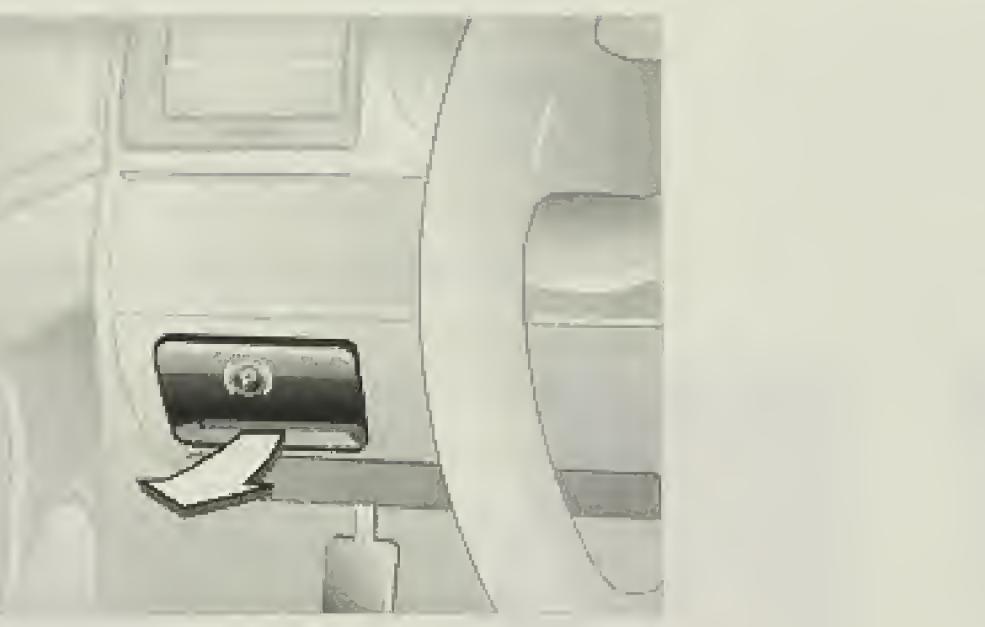


When the pedal is depressed, the "P" telltale light in the instrument cluster comes on in ignition key position 2.

! The brake lights do not come on if the parking brake is applied. Manual-gearbox cars: when parking on a slope, always apply the parking brake, as engaging 1st gear or reverse may not always prevent the car sufficiently from rolling away.

Automatic-transmission cars: select position P. 

If the traffic situation permits, to prevent corrosion it is a good idea to apply the parking brake gently from time to time when slowing down to stop at traffic lights, for example.



To release the parking brake, pull the handle. Please note that the brake is then released immediately.

The main purpose of the parking brake is to prevent the vehicle from rolling away when stationary; it acts on the rear wheels.

! If in exceptional circumstances the parking brake has to be used while the vehicle is in motion, depress the pedal carefully and sensitively, remembering to keep the release handle pulled the whole time. If the pedal is depressed too firmly, the rear wheels may be overbraked, causing the car's tail end to run wide, with a risk of losing control. 



BMW 728i, 735i, 725tds

The normal rest position for the gear lever (marked by a dot) is in the 3rd/4th gear plane of the gate.

When shifting from any gear into "Neutral" the gear lever moves independently (spring action) back into the specified gate.



BMW 740i

The normal rest position for the gear lever (marked by a dot) is in the 3rd/4th gear plane of the gate.

When shifting from any gear into "Neutral" the gear lever moves independently (spring action) back into the specified gate.

! When selecting 5th or 6th gear, always press the selector lever to the right to prevent accidental selection of either 3rd or 4th in the adjacent gate. 

Reverse

Engage this gear only when the car is standing still. Press the gear lever to the left until slight resistance is overcome.

The reversing lights then come on automatically in ignition key position 2.

! On gradients, do not hold the car on a slipping clutch; use the parking brake instead. A clutch that is allowed to slip will wear rapidly. 

64 Automatic transmission with Steptronic*

You can drive as you would with a normal automatic transmission, including the adaptive transmission control unit AGS (refer to page 67), but you can also change gears manually.

To select individual gears manually, move the selector lever to the left, away from position D, and into the M/S gate. You have now selected the automatic transmission's Sport program. As soon as you push the selector lever briefly in direction "+" or "-", the Steptronic shifts the transmission up or down a gear.

To return to the automatic mode, push the selector lever to the left, into position D.



Selector lever positions

P R N D M/S

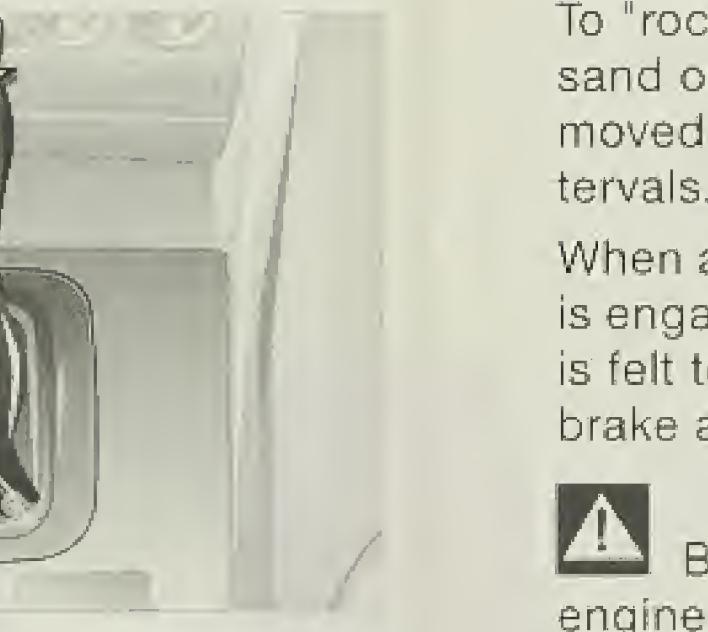
Adaptive program
Sport program
Manual mode

Up-shifts
Down-shifts

The selector lever position and the gear selected in the manual mode appear in the display (see illustration).

In the Adaptive program (selector lever position D), you also benefit from Adaptive Transmission Control (AGS).

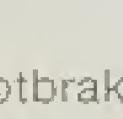
For notes on operation in the M/S gate, see page 65, and for details of the Adaptive program see page 66.



Moving the selector lever

An interlock prevents you from accidentally moving the selector lever to position R or P. To overcome this interlock, press the button at the front of the selector lever handle (arrow).

The engine can only be started in positions P or N.



Depress the footbrake with the vehicle stationary before changing from P or N or you will find it impossible to move the selector lever. This interlock also functions at engine speeds in excess of 2500 rpm. It is also necessary to depress the footbrake before selecting a Drive position because, when a gear is selected, the car will tend to "creep" at idle speed. ◀

Automatic transmission with Steptronic*

To "rock" the car free from deep snow, sand or similar, the lever can be moved between D and R at rapid intervals.

When a drive ratio (forward or reverse) is engaged, wait until the transmission is felt to engage before releasing the brake and accelerating.



Before leaving the car with its engine running, move the selector lever into position P or N and apply the parking brake, otherwise the car may

set off by itself. Never leave the car unattended with the engine running, as it then represents a serious potential hazard.

If you select N accidentally at a fairly high engine speed, release the accelerator immediately. Wait for engine to

slow down to idle speed, then engage the desired setting. Failure to do this may damage the transmission. ◀

P - Park

Engage this gear only when the car is standing still. The driven wheels are locked.

R - Reverse

Engage this gear only when the car is standing still.

N - Neutral

Select only if the journey is interrupted for a fairly long time. When the car is being driven, only select neutral if a skid occurs.

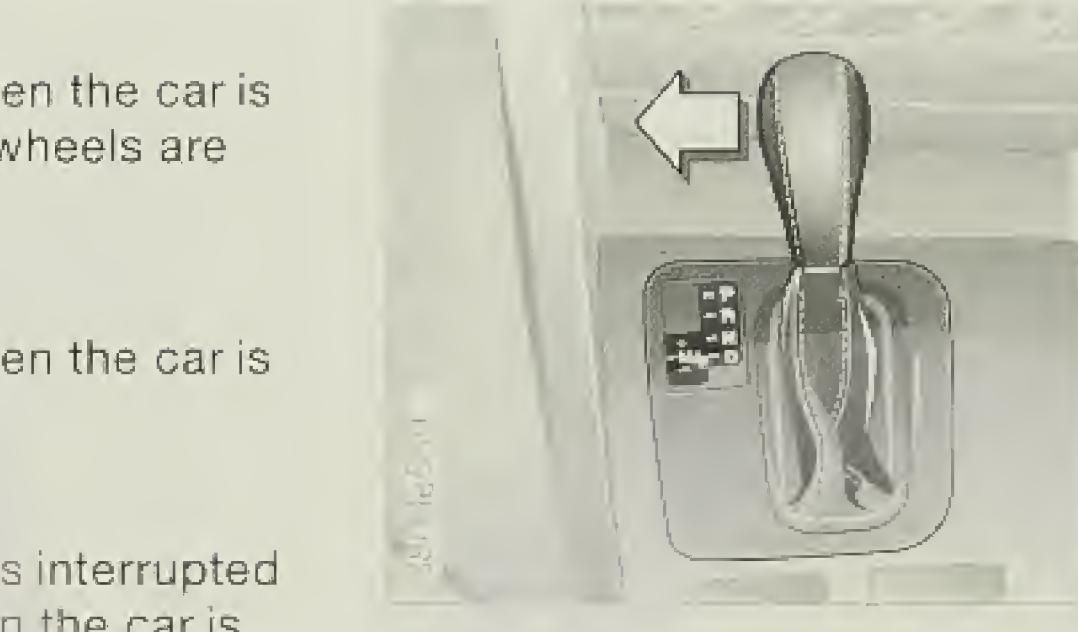
D - Drive (forward travel with automatic transmission)

Use this position for all normal driving. All forward gears are available and the AGS is operational.

"Kick-down"

In "kick-down" position, you achieve maximum acceleration and top speed in Position D.

Depress the accelerator pedal beyond the full throttle setting. A detent has to be overcome.



M/S - Manual operation and Sport program

When shifting from D to M/S, the Sport program is initially activated; S appears accordingly in the transmission display.

In position S, the AGS uses only the gearshift program with the most pronounced sports characteristic. The transmission shifts up as far as 4th gear.

The Sport program is recommended if you wish to make the most of the car's performance regardless of your current driving style.

If you now push the selector lever briefly forwards in the "+" direction, the transmission shifts up; if it is pushed back in the "-" direction, it shifts down. The first time the lever is

66 Automatic transmission with Steptronic*

pushed in either direction, the transmission switches to the manual mode. M1 ... M5 appears in the transmission display.

Impermissible upshifts or downshifts are ignored, e.g. the transmission does not shift down if the engine speed is too high. The selected gear is displayed briefly on the instrument panel. If gears are changed several times in rapid succession, the last (impermissible) gearshift is shown briefly in the transmission display, then the current gear displayed again.

! When driving in manual mode, to accelerate from 4th and 5th gear at low road speeds, – e.g. when overtaking, – change down manually or using kick-down. 

It is only possible to shift from M/S to selector lever positions P, R and N by first engaging D.

Steptronic "thinks along with you" in the following situations:

to prevent the engine from overspeeding, the next-higher gear is automatically selected just before the governed maximum engine speed is reached.

- at low speeds, it shifts down automatically without any action on the driver's part.
- kick-down immediately selects the lowest possible gear which can be used without the engine speed rising excessively.
- the car can be driven away from a standstill in 2nd or 3rd gear in certain situations, for instance in winter.

Adaptive program (AGS)

In selector lever position D, the Adaptive Transmission Control (AGS) calculates the ideal gear on the basis of your individual driving style, the current road conditions and the specific driving situation. It takes into account

whether you tend more towards a smooth or dynamic driving style, whether the road surface provides a good grip or is slippery, whether you are currently driving uphill or downhill, and whether the road is straight or winding.

To identify your driving style, the intelligent AGS system assesses the position and degree of movement of the accelerator pedal, then selects one of four stored programs which range from highly economical to highly sporting.

In addition, AGS compares wheel slip and torque under traction and selects the most suitable gear automatically from the "Normal", "Winter" and "Hill" road-condition programs, thus matching the transmission shifts to even the most extreme situations and ensuring increased traction and dynamic stability on low-grip surfaces.

Shift electronics

If the message TRANS. FAILSAFE PROG appears in the Check Control display, there is a malfunction in the control electronics or in the automatic transmission.

All selector lever positions can still be selected, but in any forward gear position, only 4th and 5th gears are actually available.

Avoid severe loads and take the car to the nearest BMW Service point.

! Never work in the engine compartment with a drive setting selected. 

For towing away, tow-starting and starting with a flat battery, see pages 143 and 144.

Automatic transmission*



Selector lever positions

P R N D 4 3 2

Transmission shift programs

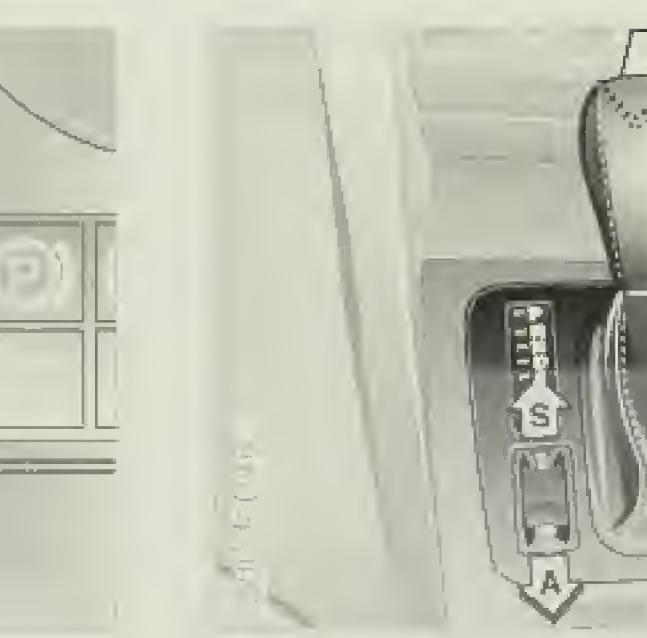
A Adaptive program

S Sport program

Slide the switch in the desired direction. Only the S program is displayed in the instrument cluster.

The engine can only be started with the selector lever at P or N.

For details of the programs, see overleaf.



Changing selector lever position

A locking mechanism is provided to prevent accidental movement of the selector lever to certain positions.

To release the lock, press the button on the front of the selector lever knob (arrow).

The engine can only be started with the selector lever at P or N.

! If you depress the foot brake while the vehicle is stationary before changing out of P or N, you will find it impossible to move the selector lever. This interlock also takes effect above an engine speed of 2500/min. It is also necessary to depress the foot brake before engaging a driving position because the car will tend to "creep" at idle speed. 

To "rock" the car free from deep snow, sand or similar, the lever can be moved between D and R at rapid intervals.

When active ratio (forward/reverse) is engaged, wait until the transmission is felt to engage before releasing the brake and accelerating.

! Before leaving the car with the engine running, select position P or N and apply the parking brake, otherwise your car may start to move.

Never leave the car unattended with the engine running, as it then represents a serious potential hazard.

If you select N accidentally at a fairly high engine speed, release the accelerator immediately. Wait for idle speed, then select the desired drive position, otherwise the transmission could be damaged. 

P - Park

Engage this gear only when the car is standing still. The driven wheels are locked.

R - Reverse

Engage this gear only when the car is standing still.

N - Neutral

Select only if the journey is interrupted for a fairly long time. When the car is being driven at speed, only select neutral if a skid occurs.

D - Drive (forward travel with automatic transmission)

Use this position for all normal driving. All forward gears are selected by the transmission as necessary.

4 - Direct

The transmission shifts up as far as 4th gear.

3 and 2 - for hill-climbing and braking

Select these positions to restrict the range of gears available, for example on steep uphill or downhill gradients when travelling over mountain passes.

In position 2, 1st gear is selected automatically. These transmission settings are particularly suitable for towing a trailer.

The transmission shifts down at points which correspond approximately to the limits of the engine speed ranges in each gear.

"Kick-down"

In "kick-down" position, you achieve maximum acceleration and top speed in Position D.

Depress the accelerator pedal beyond the full throttle setting. A detent has to be overcome.

Transmission shift programs

Your BMW's automatic transmission is equipped with Adaptive Transmission Control (AGS) as standard.

In program A and selector lever position D, the AGS adapts ideally to each driver's style and to prevailing road conditions.

As a result, the remaining forward-gear selector lever positions are only needed in extreme situations, for instance as explained for selector position 2.

A - Adaptive program

This program is automatically selected whenever the engine is started. In the forward driving positions,

Adaptive Transmission Control automatically selects the most suitable shift program from those available. It adapts continuously to the manner in

which the car is being driven (e.g. calm and relaxed or harder and more dynamically), to road influences (smooth surfaces, severe uphill gradients etc.) and to actual driving circumstances (e.g. twisty roads, descending steep gradients).

S - Sport

In this position, the gear shift program with the most pronounced sports characteristic is used.

Selection of this program is recommended as a means of making maximum use of the car's performance, regardless of the driving style at any given moment.

Automatic transmission***Selector lever positions**

Positions 4, 3 and 2 have the effect of limiting further upward shifts, if this is desired by the driver.

The AGS also functions in these selector lever positions, with certain limitations on the available gears, depending on the position selected.

Special functions

In program A, Adaptive Transmission Control influences the choice of gear by means of various special functions.

This has the effect of suppressing certain shifts that would normally have occurred, and may cause others to

take place in certain circumstances although the driver would not have expected them.

Control of winter program

When driving on slippery surfaces (snow and ice), a winter shift program is selected automatically. The car

moves away from a standstill in 2nd gear and shifts up to higher gears as early as practicable. This makes progress over slippery surfaces easier and enhances the car's traction and dynamic stability.

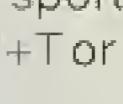
AGS switches out of the winter program as soon as a higher-grip road surface is identified or if the sport program is selected or the ASC+T or DSC switched off.

Shift electronics

If the message TRANS. FAILSAFE PROG appears in the Check Control display, there is a malfunction in the control electronics or in the automatic transmission.

All selector lever positions can still be selected, but in any forward gear position, only 4th and 5th gears are actually available.

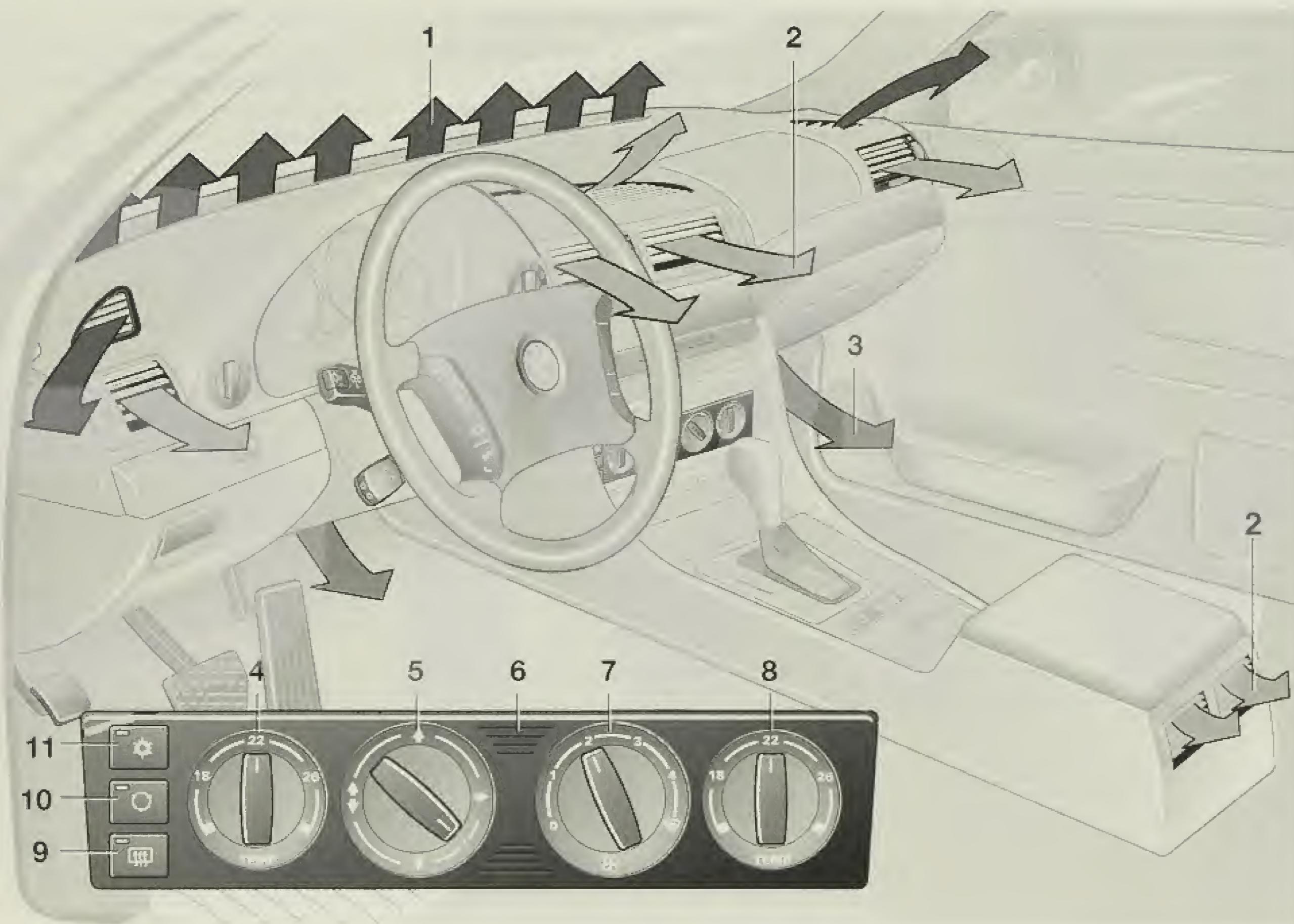
Avoid severe loads and take the car to the nearest BMW Service point.



Never work in the engine compartment while a drive position is selected. ↵

For towing away, tow-starting and starting with a flat battery, see pages 143 and 144.

70 Heating and ventilation/air conditioning



Heating and ventilation/air conditioning

- 1 Air supply to windscreen and side windows
- 2 Air supply to upper body zone
By means of the knurled wheels, the air supply can be opened and shut off in an infinitely variable manner, the airflow direction altered (at rear: via lever in centre of grille) and the temperature regulated (not at rear). When shut off, air emerges only through the outlets in the top of the fascia.
- 3 Air for front footwell
There are corresponding air vents in the rear footwell.
- 4 Temperature – left side
- 5 Air distribution
Towards windows, upper body and footwells. All intermediate positions are possible.
- 6 Air intake grille for the interior temperature sensor – do not obstruct
- 7 Air supply
Right-hand limit position: defrosting and demisting windows
- 8 Temperature – right side
- 9 Heated rear window
- 10 Recirculated air mode
- 11 Air conditioning

Tips for feeling good

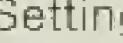
For your temperature (4, 8), a comfortable and advisable setting is 22 °C. You turn air distribution 5 to setting "5 o'clock" (interrupted line on scale), airflow control 7 to setting 2. Align the air vents 2 in such a way that air flows past you rather than being directed straight at you. Move the knurled wheel between vents 2 for the upper body into a central position to enable cooler air to reduce the driver fatigue level on long journeys.

The following description guides you to further individual settings.

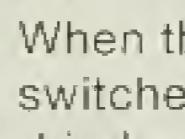
Air supply

 The air supply can be varied in five stages.

In position 0 the blower, the heating and the air conditioning are switched off. In position 0, you can shut off the incoming airflow completely with the recirculated air mode button.

Setting  rapidly eliminates ice and frost from the windscreen and side windows.

The greater the incoming flow of air, the more effective heating and ventilation will be.

Air conditioning

When the air conditioning is switched on, the air is cooled, dried and, depending on the temperature setting, re-heated. Depending on weather conditions, the windscreen may fog over momentarily when the engine is started.

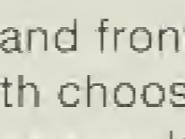
You can keep the windows clear at outside temperatures below about 5 °C by switching off the air conditioning. The windows may also mist over if the system is switched on and off too frequently.



Condensate forms in the air-conditioning unit and emerges below the car. Traces of water on the ground are therefore quite normal. 

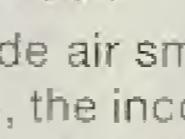


If the windows mist up in recirculating mode, switch it off. 

Temperature

The driver and front passenger can both choose their preferred temperature setting. The calibrated markings are guide values for the interior temperature. For maximum comfort, the 22 °C setting has proved satisfactory, even with the air conditioning in operation.

In the footwell setting, a small amount of air still reaches the windows in order to prevent them from fogging over. The five o'clock position can be regarded as the normal setting (broken line on scale).

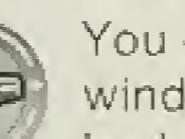
Recirculated air mode

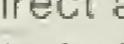
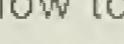
If the outside air smells objectionable, the incoming airflow can be shut off.

The air inside the car is then recirculated.



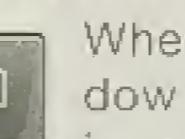
If the windows mist up in recirculating mode, switch it off. 

Air distribution

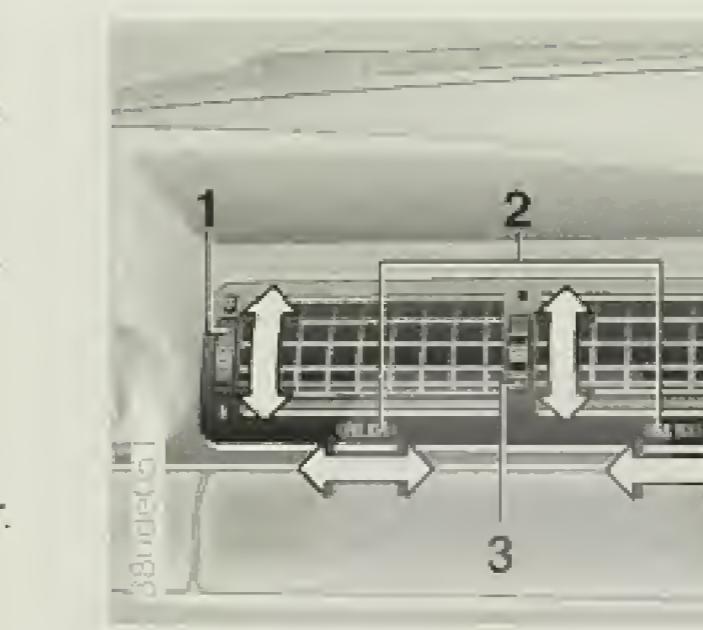
You can direct airflow to the windows , to the upper body area  and to the footwell . Any intermediate setting is possible.

In the footwell setting, a small amount of air still reaches the windows in order to prevent them from fogging over.

The five o'clock position can be regarded as the normal setting (broken line on scale).

Heated rear window

When the heated rear window is in use, the telltale is on. The heated rear window switches itself off automatically.

**Draught-free ventilation**

The air outlets for the upper body area can be adjusted to suit the occupants' preferences:

Using knurled wheels 1, the outlets can be opened and closed in an infinitely variable manner and also directed up or down. When the controls are closed, air emerges only at the top of the fascia. Using knurled wheels 2, the airflow can be varied from one side to the other.

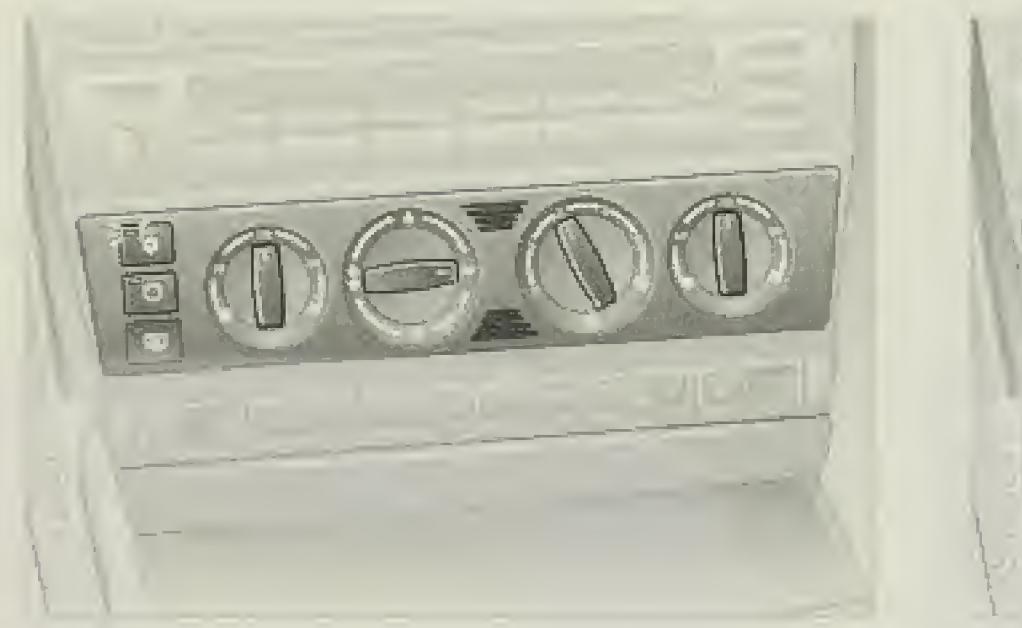
Knurled wheel 3 blends a varying amount of cool air with the air for the upper body area outlets:

Turn towards blue zone – cooler
Turn towards red zone – warmer

Setting of air vents in rear compartment:
Using the knurled wheel, you can open and close the vents in any position, altering the direction of airflow with the levers in the center of the grilles. The air emerging into the rear passenger area is not heated.

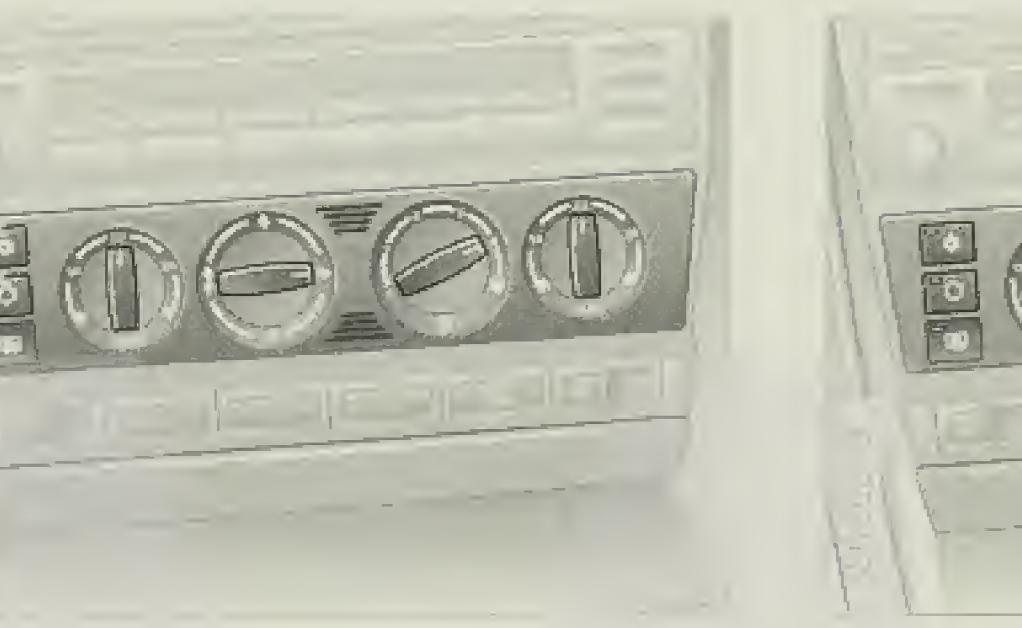
Micro-filter

The microfilter traps dust and pollen in the incoming airflow. It is renewed when your BMW Service point carries out routine maintenance work. If airflow is noticeably less than usual, this may indicate that the filter should be renewed earlier.



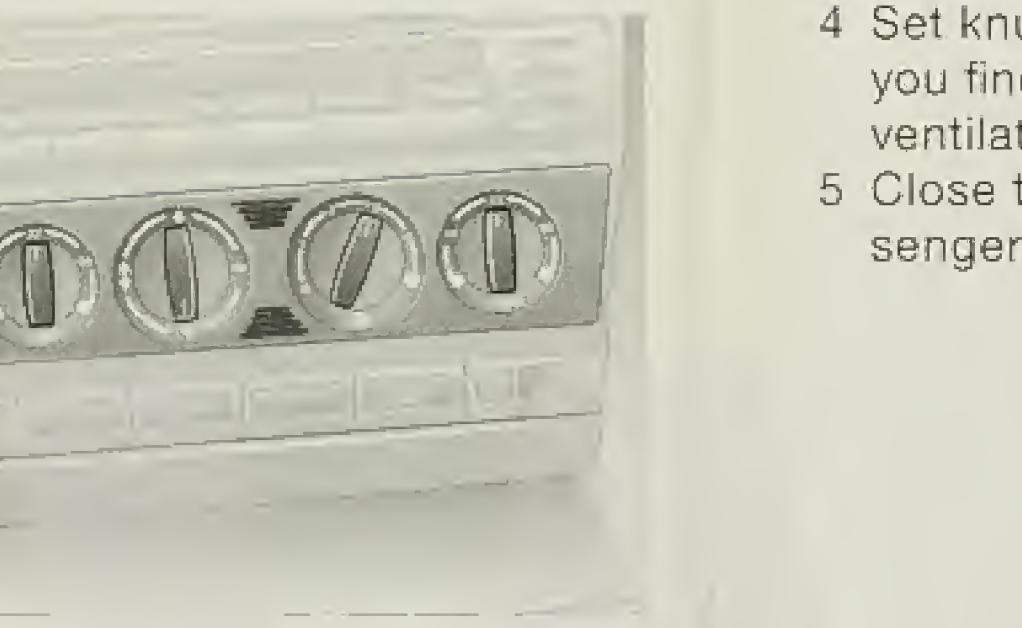
Cooling

- 1 Turn the rotary air supply control to setting 2
- 2 Switch on the air conditioning
- 3 Use the rotary temperature controls to select an interior temperature you find pleasant, e.g. 22°C. The control system will ensure that the chosen temperature is reached quickly and then kept constant
- 4 Rotary switch for air distribution in position
- 5 Open the air outlets for the upper body zone
- 6 Use knurled wheel 3 to select a temperature you find pleasant (see "Draught-free ventilation", page 73).



Rapid ventilation

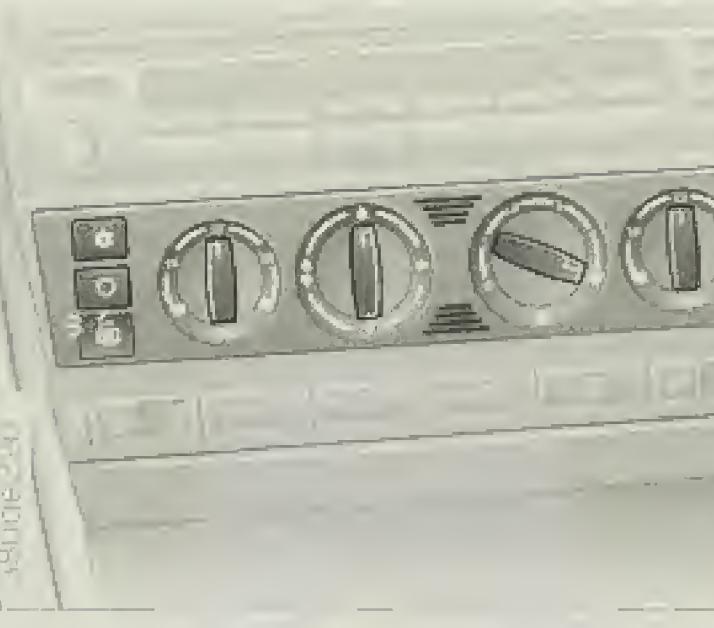
- 1 Turn the rotary air supply control to setting 4
- 2 Switch on the air conditioning and select the recirculated air mode
- 3 Select a temperature you find pleasant at the rotary temperature controls, e.g. 22°C. The control system will ensure that the chosen temperature is reached quickly and then kept constant
- 4 Rotary switch for air distribution in position
- 5 Open the air outlets for the upper body zone
- 6 Set knurled wheel 3 to cold (blue) (see "Draught-free ventilation", page 73).



Rapid heating

- 1 Turn the rotary air supply control to setting 3
- 2 Use the rotary temperature controls to select an interior temperature you find pleasant, e.g. 22°C. The control system will ensure that the chosen temperature is reached quickly and then kept constant
- 3 Select a temperature you find pleasant at the rotary temperature controls, e.g. 22°C. The control system will ensure that the chosen temperature is reached quickly and then kept constant
- 4 Rotary switch for air distribution in position
- 5 Open the air outlets for the upper body zone
- 6 Set knurled wheel 3 to cold (blue) (see "Draught-free ventilation", page 73).

- 4 Set knurled wheel 3 to a temperature you find pleasant (see "Draught-free ventilation", page 73)
- 5 Close the air outlets for the rear passenger area.



Defrosting and demisting windows

- 1 Fan rotary switch for directing air placed in setting
- 2 Use the rotary temperature controls to select a pleasant interior temperature, e.g. 22°C
- 3 Close the rear passenger area outlets
- 4 To defrost the rear window, switch on the heated rear window.

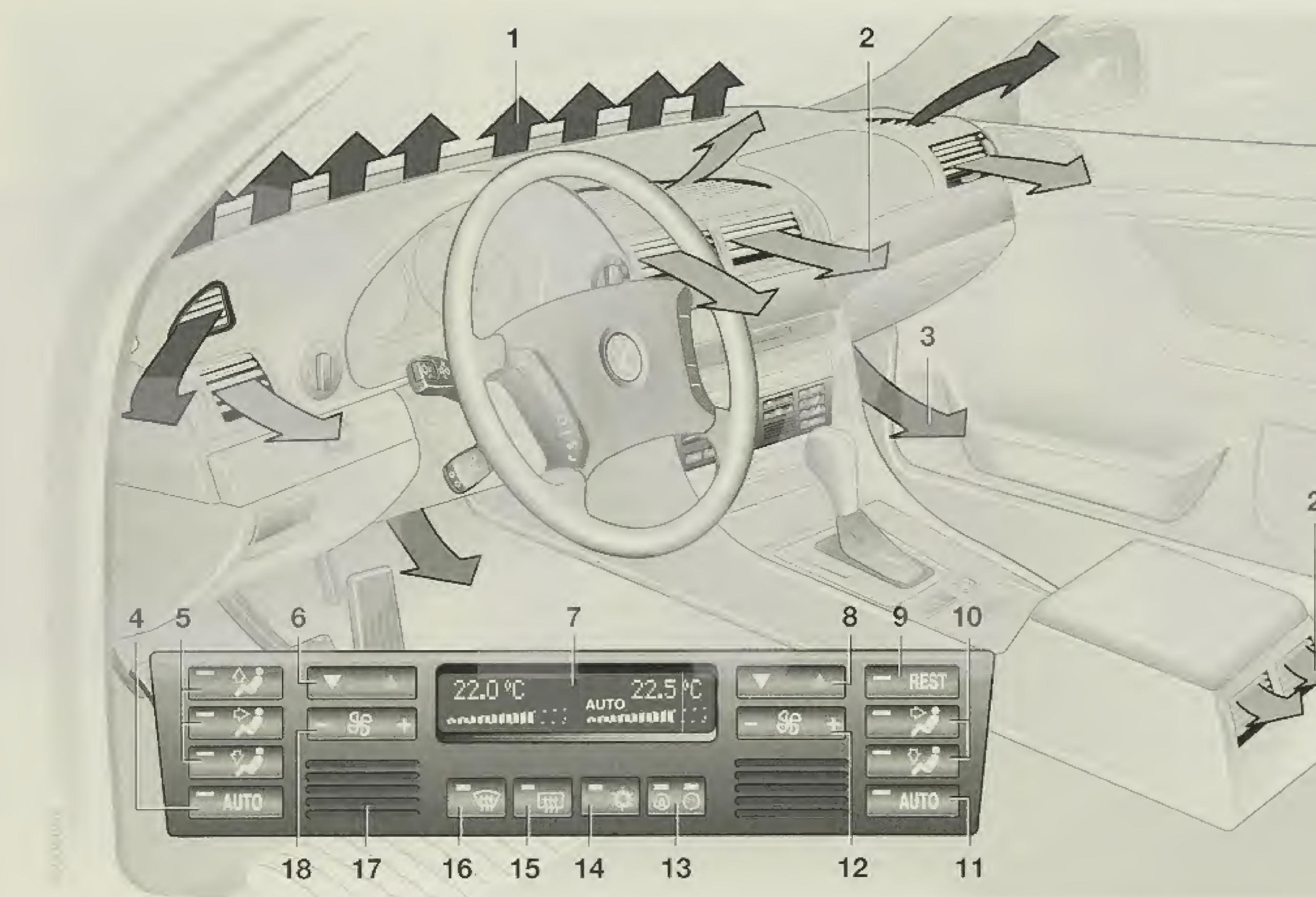


Heating

If the windows are free from ice and condensation, the following settings are recommended:

- 1 Turn the rotary air supply control to setting 2
- 2 Use the rotary temperature controls to select an interior temperature you find pleasant, e.g. 22°C. The control system will ensure that the chosen temperature is reached quickly and then kept constant
- 3 Rotary switch for air distribution in setting
- 4 Close the air outlets for the rear passenger area.

76 Automatic air conditioning*



Automatic air conditioning*

- 1 Air supply to windscreen and side windows
- 2 Air supply to occupants' upper body zone. The knurled wheels enable you to open and close airflow in an infinitely variable manner and to alter the direction of flow (in the rear compartment, using a lever in the centre of the grille), and to adjust the temperature. When closed, air only emerges from the top of the instrument panel.
- 3 Air supply to front footwell
There are also corresponding air outlets in the rear footwells
- 4 Automatic air distribution – left side
- 5 Individual air distribution – left side
- 6 Temperature – left side
- 7 Temperature and air supply display for left and right sides of interior
- 8 Temperature – right side
- 9 Use of residual heat
- 10 Individual air distribution – right side
- 11 Automatic air distribution – right side
- 12 Air supply – right side
- 13 Recirculated air mode
- 14 Air conditioning
- 15 Heated rear window
- 16 Defrosting and demisting windows
- 17 Air intake grille for the interior temperature sensor – do not obstruct
- 18 Air supply – left side

Automatic air conditioning*

Pleasant temperatures regardless of the weather outside contribute towards relaxed driving. This not only contributes to your personal well-being but also enhances road safety. Since pleasant driving conditions are clearly a subjective matter, the interior temperature can be selected separately on the driver's and passenger's side. The large number of air outlets, their locations and provision for adjusting them individually ensure an adequate air supply without draughts. A micro-filter and an activated charcoal filter purify the incoming airflow. A refrigerant containing no CFCs is used in the air conditioning, in order to protect the environment.

ght climate for feeling

automatic, i.e. switch on button 4. Select a pleasant temperature for yourself, e.g. above an ambient temperature you can also use the air condition 14. This dries the air and prevents windows from misting up, since if someone sits in the car it clothing. Direct the vents 2 in way that air flows past you, than straight at you. Move the wheel between vents 2 for the body to a central position to cooler air to reduce the driver level on long journeys.

AUTO trols air and incoming airflow cally and also match ings to outside infl winter). It ensures a mate at every time terior temperature e.g. 22 °C. Temperature setting AUTO for airflow ap refer to the summer the vents for the up Switch the air cond warm season of the cooling effect is ob

Following description guides you to individual settings.

Individual air distribution

Automatic air conditioning*

Washing and demisting windows

This program eliminates ice and moisture condensate very from the windscreen and side ws.

Conditioning

When the air conditioning is switched on, the air is cooled, and, depending on the chosen temperature setting, re-heated. Depending on weather conditions, the screen may fog over momentarily when the engine is started. You can keep the windows clear at outside temperatures below about 5 °C by turning off the air conditioning. Windows may also mist over if the air is switched on and off too frequently.

Condensate forms in the air-conditioning unit and emerges below. Traces of water on the ground before quite normal. ▲

If you have a multi-functional wheel with a recirculation (refer to page 21), you can switch between "Off" and recirculation as well as between AUC and dehumidifying mode.

Recirculated air mode Automatic Recirculated Air (ARC)*

If the outside air contains pleasant odours, the

Overflow can be shut off. The water is then recirculated. The

odes can be obtained in succession by shifting the switch.

Left telltale light on – AUC opera-

tion: the system identifies pollutants in the outside air and shuts off the supply if necessary. The air inside the car is then recirculated. Right telltale light on: the outside air supply is permanently shut off. The air inside the car is recirculated.

 The driver and the front passenger have separate controls on the driver's and front passenger's sides of the car. The values they select appear on display 7, but are only a guide to the actual interior temperature. A setting of 22 °C has been found satisfactory, even with the air conditioning

you have a multi-function steering wheel with a recirculating air button (refer to page 21), you can switch between "Off" and recirculating mode, as well as between AUC and recirculating mode. After the system has been switched on. After the journey has started, the selected temperature is reached as quickly as possible, both in summer and in winter, and kept constant by the regulating system.

Air supply

 In the AUTO program the incoming air supply is controlled automatically, and AUTO appears in display 7 (refer to overview on page 76). You can vary the incoming air supply by means of "+" and "-". Your entry is indicated by a bar display, the automatic air supply is switched off and the automatic airflow distribution system remains unchanged. However, you can switch the automatic air supply system back on by pressing the AUTO button.

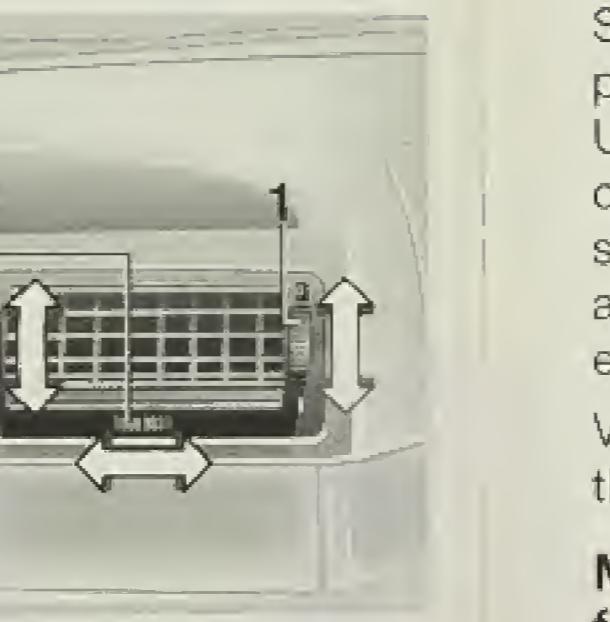
If you press "-" at the lowest blower speed setting, all the displays go out: blower, heating and air conditioning are switched off and the air supply shut off. The automatic air conditioning can be restarted by pressing any button (except REST button 9).

Use of residual heat**REST**

Heat remaining in the engine is used to warm the car's interior when the ignition is switched off, for example during a lengthy wait at a closed level crossing. In ignition key position 1, you can alter the automatic air conditioning settings. In ignition key position 0, the heated air is directed automatically to the windscreen, side windows and footwells.



This function can be activated if the outside temperature falls below about +15°C, the engine is at operating temperature and the battery is adequately charged. ▶

**Draught-free ventilation**

The air outlets for the upper body area can be adjusted to suit the occupants' preferences:

Using knurled wheels 1, the outlets can be opened and closed in an infinitely variable manner and also directed up or down. When the controls are closed, air emerges only at the top of the fascia. Using knurled wheels 2, the airflow can be varied from one side to the other.

Knurled wheel 3 blends a varying amount of cool air with the air for the upper body area outlets:

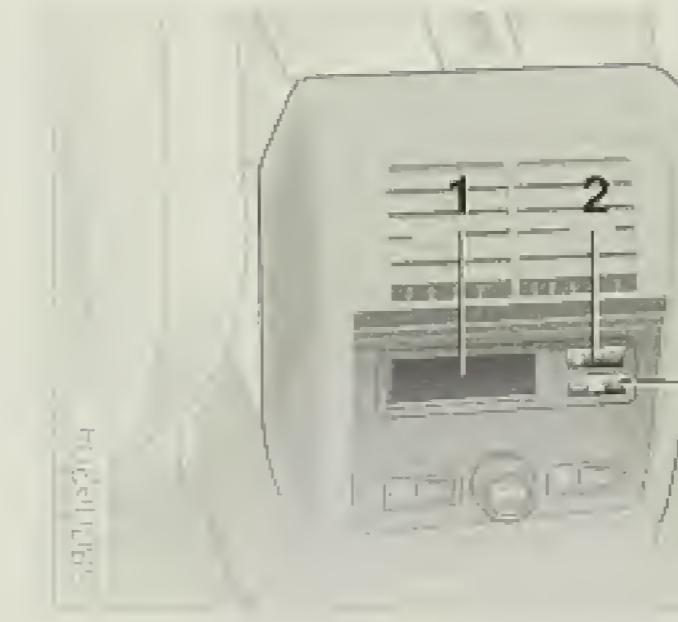
Turn towards blue zone – cooler
Turn towards red zone – warmer

Automatic air conditioning* Rear-seat area air conditioning*

Setting the air vents in the rear compartment:

Using the left knurled wheel, you can open and close the air vents in any setting. Use the right knurled wheel to adjust the temperature of the air emerging from the front outlets.

Vary the direction of the airflow with the levers in the centre of the grille.



- 1 Temperature display, air supply
- 2 Temperature/switiching on
- 3 Air supply/switiching on

2 Temperature

When traveling in the rear compartment, you can individually select the temperature you prefer for the air emerging from the outlets above the controls. The displayed values are a guide to the actual interior temperature. 22°C has been found to be a pleasant setting. After setting out on a journey, the selected temperature can be reached rapidly – in summer or winter – and maintained at a constant level.

3 Air supply

If, at the slowest blower setting, you press "-", all the displays go out: the blower is switched off and the air supply shut off. By pressing again you can re-start the rear passenger-area air conditioning. Note that individual settings at the front controls also influence the rear passenger-area air conditioning.



System malfunctions are shown in plain text; information is provided and a warning sounded in ignition key position 2.

- 1 CHECK key
- 2 Symbol that a warning is present
- 3 Display

A system of two priority categories has been adopted for the fault signals:

RELEASE PARKINGBRAKE

Warning display with audible signal. Appears whenever the car is driven off without releasing the parking brake.

CHECK BRAKE FLUID

The level is close to the minimum mark. Top up at the earliest opportunity. See page 134. Have the cause of brake fluid loss traced and rectified by BMW Service.

PRE-HEATING*

Do not start the engine until this display has gone out.

Priority 1

These faults are indicated by a gong signal and by warning symbol 2 flashing. If several faults develop simultaneously, they are displayed in succession. The displays are retained until the fault has been eliminated, and cannot be cancelled with Check button 1.

STOP! ENGINE OILPRESS

Engine oil pressure has dropped too low. Stop the car immediately and switch off the engine. See page 17.

COOLANTTEMPERATURE

The temperature is too high. Stop the car immediately and switch off the engine.

Refer to pages 20, 134

TYRE DEFECT*

Immediately slow down to a complete stop, avoiding abrupt use of brakes and steering wheel.

FUEL INJECT.SYS.*

Have a check performed by BMW Service

SPEED LIMIT*

Display shows whenever you are exceeding the legal speed limit in a given country.

Priority 2

These malfunctions are displayed for 20 seconds in ignition key position 2. After the text displays have gone out, symbols remain visible to indicate that there are fault messages in the Check Control. By pressing the CHECK key, the displays can be shown again.

PRE-HEATING*

Do not start the engine until this display has gone out.

Check Control

BOOTLID OPEN

Display only appears when car is driven away from a standstill for the first time.

DOOR OPEN

Display appears when the car has reached a given (low) speed.

FASTEN SEAT BELTS*

The warning light with belt symbol also comes on.

CHECK BRAKE LIGHTS

A bulb has failed or the circuit is defective. Refer to pages 140, 153.

CHECK LOWBEAM LIGHTS

CHECK PARK LIGHTS

CHECK TAIL LIGHTS

CHECK FRONTFOGLAMPS

CHECK REAR FOGLAMPS

CHECK NUMPLATE LIGHT

CHECK TRAILER LIGHTS

CHECK HIGHBEAM LIGHT

CHECK REVERSE LIGHTS

A bulb or the circuit is defective. See pages 140, 151 or consult BMW Service

TRANS.FAISAFE PROG

In the event of an electronics malfunction in the automatic transmission, refer to pages 66, 69.

TYRECONTROL INACTIVE*

Brief fault in RDC or system fault, refer to page 101.

CHECK BRAKE LININGS

The brake pads are worn. See page 137.

WASHER FLUID LOW

Top up at the next opportunity. See page 136.

CHECK ENGINE OIL LEV

Engine oil level has dropped to near the permissible minimum.

Add oil at the next opportunity (for instance when refuelling).

See page 130.

REMOTE KEY BATTERY

Renew the battery. See page 37.

CHECK COOLANT LEVEL

Coolant level is too low; top up at the next opportunity. See page 134.

ENGINE FAISAFE PROG*

Engine control system malfunction. Contact BMW Service

"SET TYRE PRESSURE"

The RDC system has adopted the tyre pressure in the tyres as the level which it has to monitor. See page 100.

"CHECK TYRE PRESSURE"

Correct your tyre pressure to the correct level at the next available opportunity (refuelling stop). See page 100.

KEYN IGNITION LOCK*

A gong signal is also heard.

Messages displayed at the end of a journey

All malfunctions which have been indicated during a journey are displayed again in succession when the ignition key is turned back to position 0.

Even with the ignition key removed and the display blank, other recall fault messages with the CHECK button for up to about three minutes after the end of a journey; if several messages were displayed, press the CHECK button as many times as necessary.

The following information is also provided if appropriate:

LIGHTS ON

Display at end of journey (when driver's door is opened).

KEYN IGNITION LOCK*

A gong signal is also heard.

Testing the Check Control display

Press the CHECK button in ignition key position 2:

the display should show CHECKCONTROL OK.

There are no malfunctions in the systems monitored.

Multi-Information Display (MID)

The MID is used for the central display and control of the following on-board systems. Depending on the equipment specification, the various MID versions have different function keys. The following on-board systems can be displayed:

- Digital clock (time, date)
- Audio systems (radio, cassette, CD)
- On-board computer (e.g. fuel consumption, range)
- Telephone* (e.g. dialling)



Audio system, digital clock and on-board computer

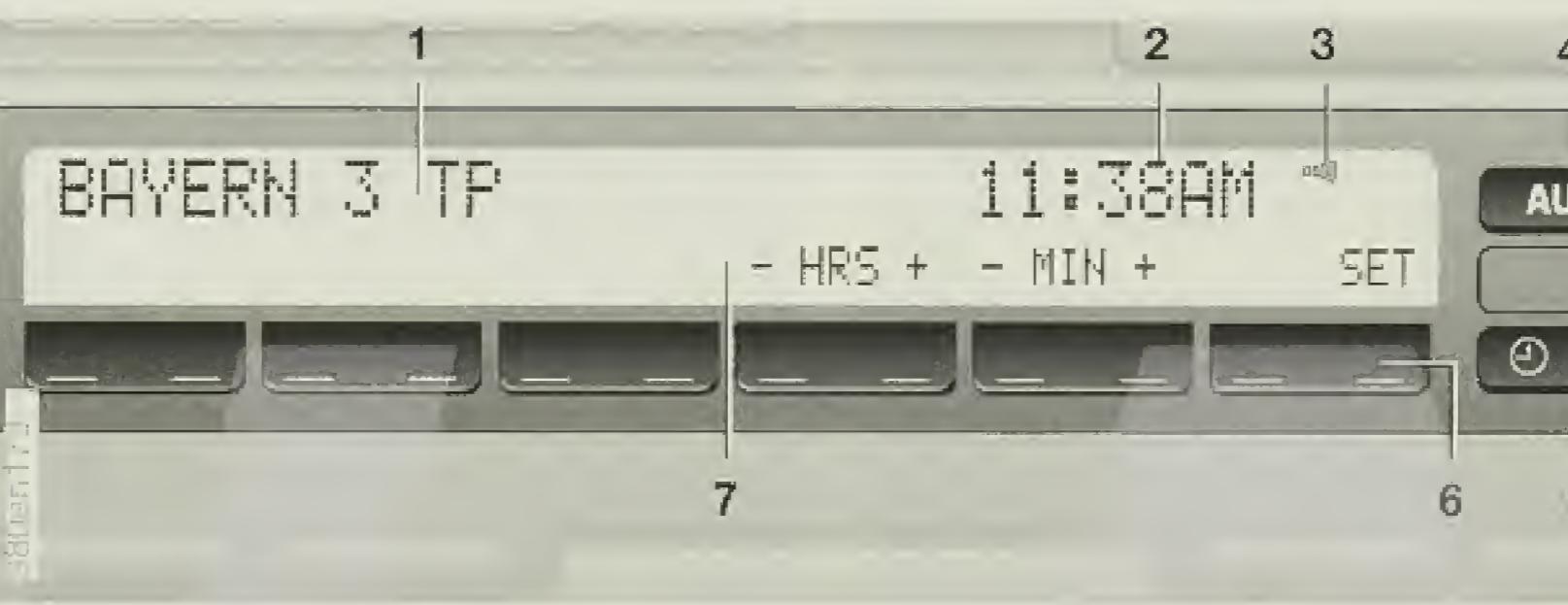
Explanations and operating instructions for the digital clock and the on-board computer are given on the following pages. Operation of the audio systems, car phone and on-board monitor are described in supplementary owner's manuals.



Unrealistic figures are not transferred.

If the power supply is interrupted, all the stored data are erased. After restoring the power supply, the time and possibly also the switch-on times for independent heating/independent ventilation control, distance and speed limit values must be input again. ▲

Digital clock



Audio system, digital clock, on-board computer and telephone*

You can operate the following functions from ignition key setting 1:

- Time and date
- Programming a reminder signal (Memo) every hour, for instance so that radio news bulletins are not missed
- Independent heater/ventilation.

- 1 Display for audio system (see supplementary owner's manual for operating instructions)
- 2 Time and date display
- 3 Sound-wave symbol for active Memo function
- 4 Function key for audio system
- 5 Function key for digital clock and on-board computer
- 6 Input and call up keys for audio system, digital clock and on-board computer
- 7 Display for input and call-up keys.

To call up time or date

Press the function key for the digital clock.

In ignition key setting 0 or with the key withdrawn, the time appears for eight seconds; from ignition key setting 1, the time remains in the display.

If you press the DATE button with the time activated, the date appears on the display.

To return to the time display, press the digital clock function key.

You can have the time displayed as a 12- or 24-hour clock and the date in European or American order. Changeover:

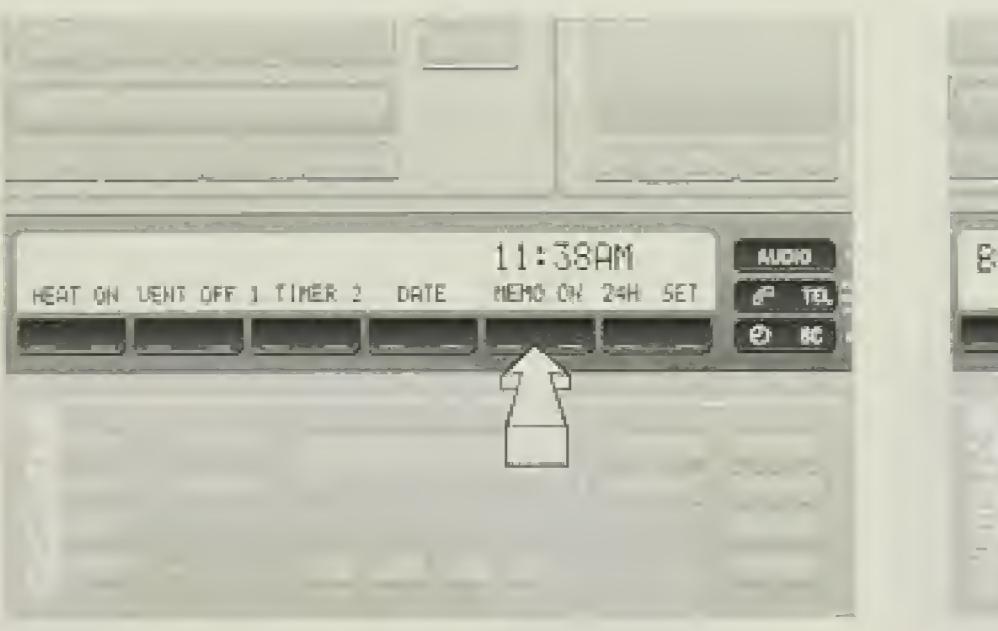
Time:

- 1 Press digital clock function key
- 2 Press the display unit changeover key (12/24-h ou).

When the 12-hour clock is in use, the letters AM or PM appear after the time.

Date:

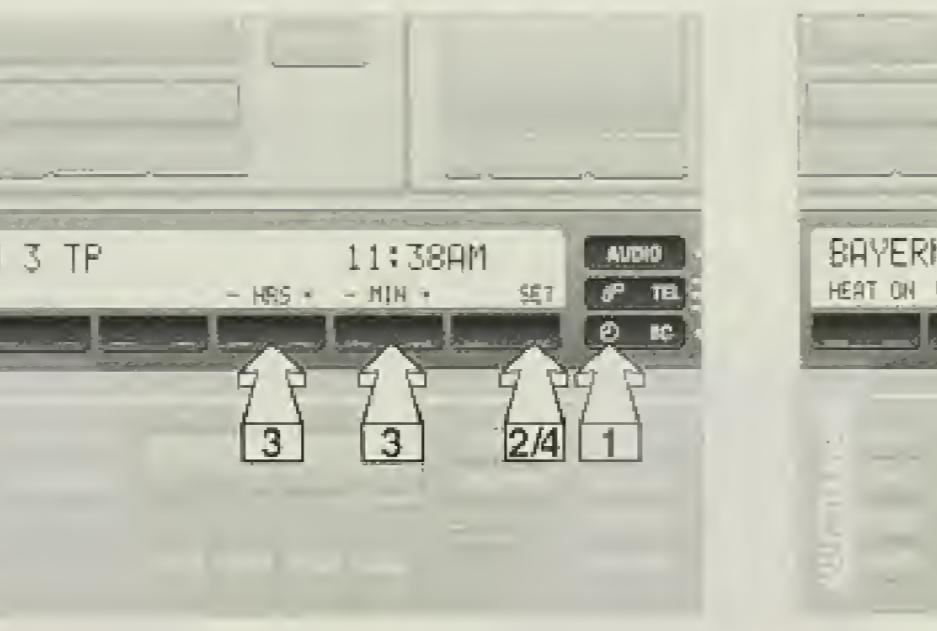
- 1 Press digital clock function key
- 2 Press DATE key
- 3 Press the display unit changeover key (12/24-h ou).



Enter a reminder signal

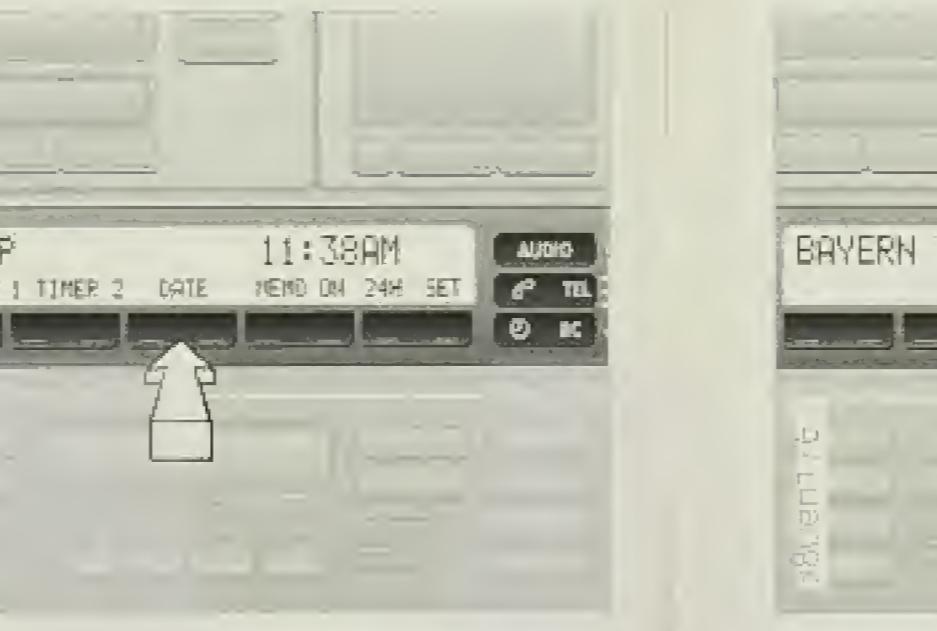
- 1 Press digital clock function key
- 2 Press the MEMO ON/OFF key to switch the hour signal on or off.

A sound-wave symbol appears in the display to indicate that the MEMO function is in use, and a time signal is heard 15 seconds before each full hour.



Altering the time display

- 1 Press digital clock function key
- 2 Press the SET button. Dots flash in the display
- 3 Enter the time via the input keys - HRS + and - MIN +.
- 4 Complete your entry of numerals by pressing the SET key.



Altering the date display

- 1 Press digital clock function key
- 2 Press the DATE key. Dots and the word DATE flash on the display.



Time and date input after a power supply interruption

- 1 Press the digital clock function key. The dots in the display flash.
- 2 Enter the time via the input keys - HRS + and - MIN +.
- 3 Press the SET key to start the clock

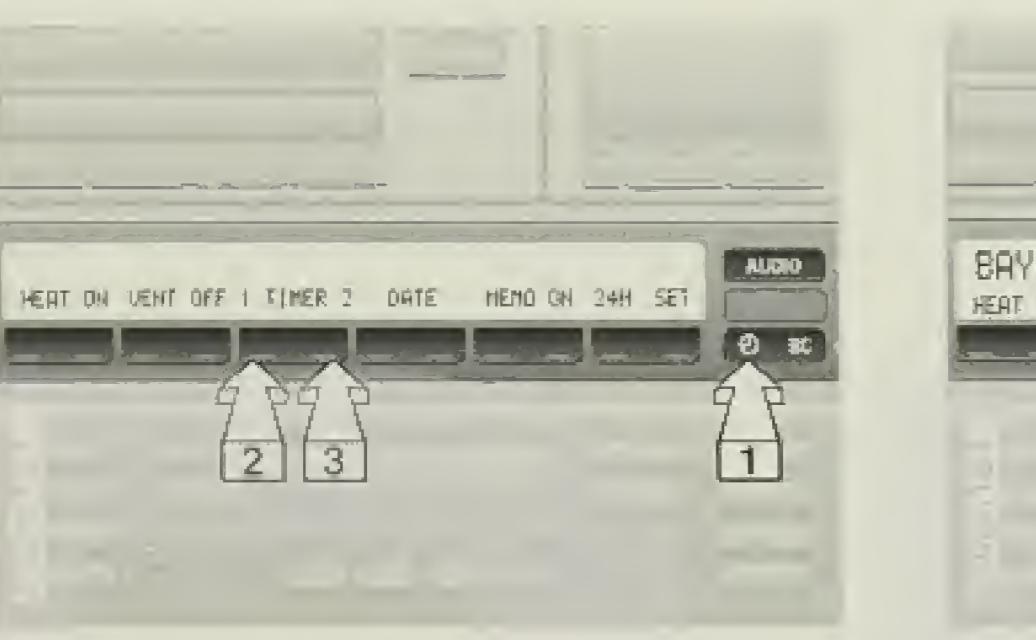
4 Enter the date at the - DAT +, - MONTH + and - YEAR + keys.

5 Press the SET key.

Enter the date using the data input keys

- 1 - DAY +, - MON + and - YEAR +
- 2 Complete your entry by pressing the SET key.

(the system takes leap years into account, so that no special manual adjustment is necessary.)

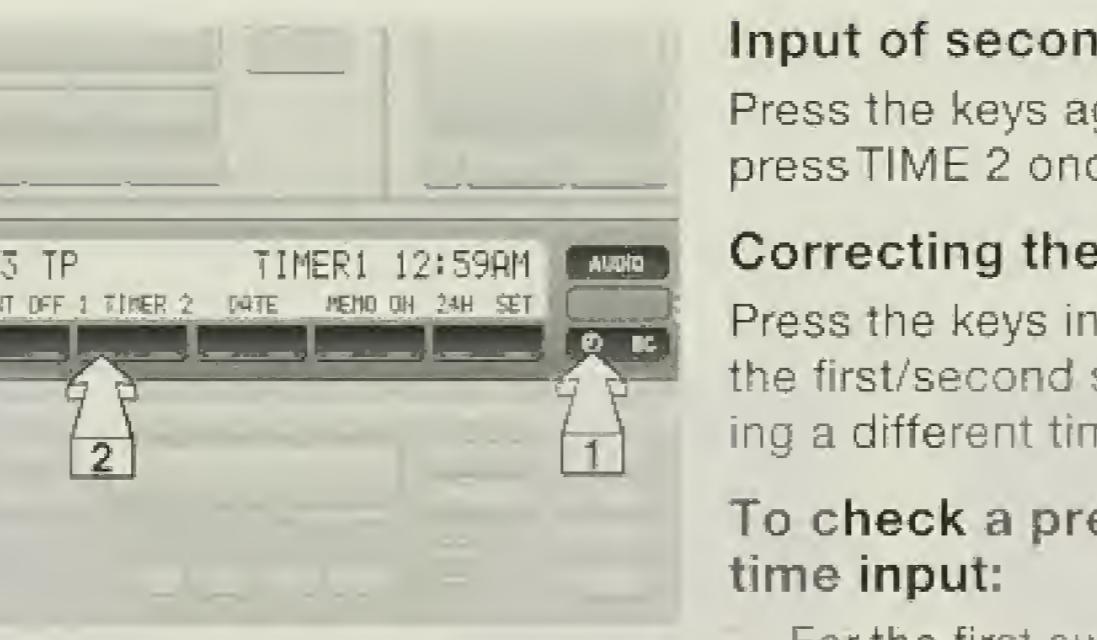


Independent heater and independent ventilation control

Input of switch-on times

You can preselect two switch-on times for the independent heater or ventilation control. The heater or ventilation is switched off automatically after 30 minutes.

For important information on operating the independent heater/ventilation control, see page 102.



Input of first switch-on time

Input is possible only if the digital clock is running and the ignition key is in position 1.

1 Press keystroke sequence as shown in the display

2 Press the SET key.

The word TIME 1 flashes on the display.

3 Enter the desired time with the keys – H + and – MIN +.

4 Complete your entry by pressing the SET key.

An asterisk appears on the left of the display beside the time and the LED to the right of the BC function key lights up.

Input of second switch-on time

Press the keys again as illustrated, but press TIME 2 once only to call up.

Correcting the time input

Press the keys in the same order as for the first/second switch-on time, selecting a different time input.

To check a previous switch-on time input:

For the first switch-on time, press the keystroke sequence shown in the drawing (centre column).

For the second switch-on time, proceed similarly but press TIME 2 to call up the time.

Digital clock

Activating/disabling the switch-on times

After pressing the digital clock function key, the preset switch-on times can be activated and disabled by pressing the keys TIME 1 or TIME 2.

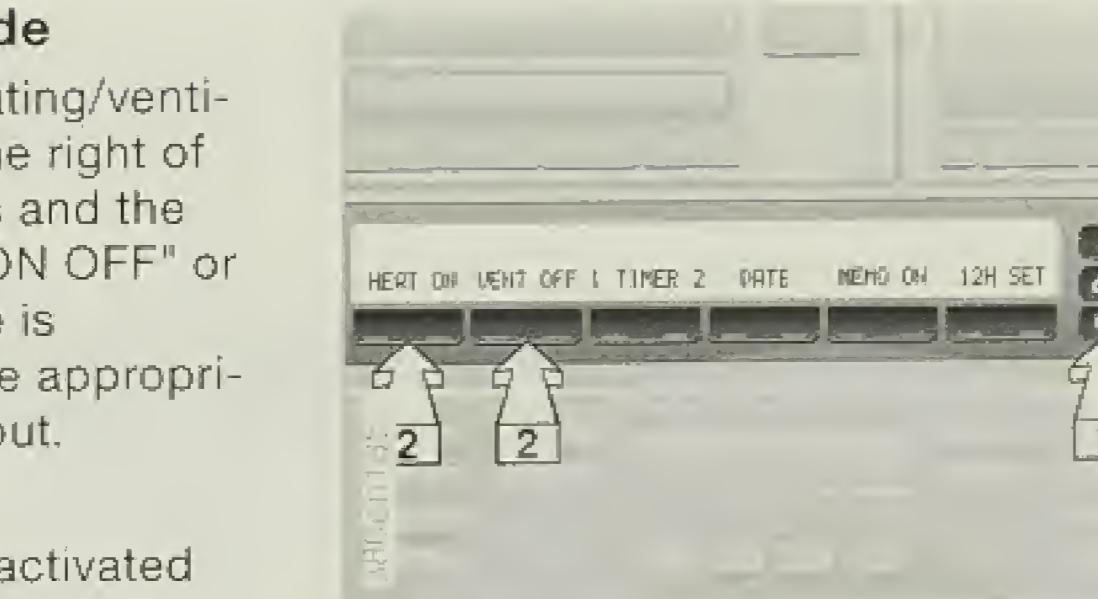
When activated, the LED to the right of the BC function key lights up and an asterisk appears on the display to the left of the time.

The switch-on times remain stored until cancelled by a new input.

Heating/ventilation mode

During operation of the heating/ventilation system, the LED to the right of the BC function key flashes and the display shows "VENTILATION OFF" or "HEATING OFF". This mode is switched off by pressing the appropriate key and the LED goes out.

► Parking ventilation is activated automatically after a preset switch-on time at temperatures above 16°C. Below under 16°C, the park heating is activated. ◀

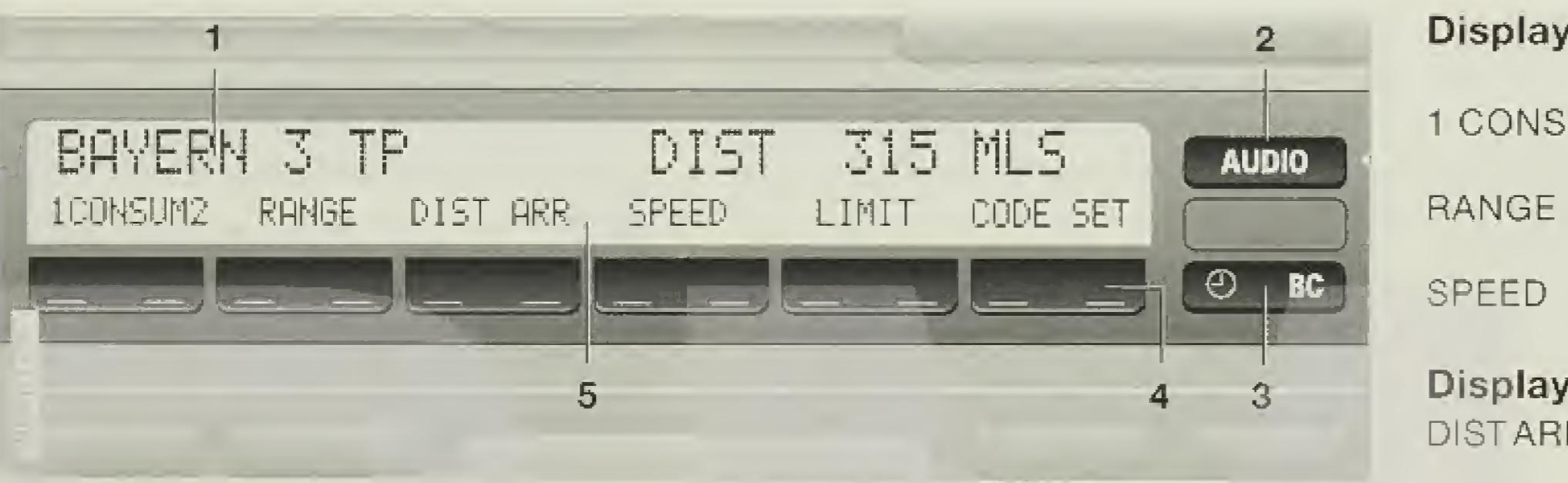


Direct switch-on and switch-off

This is only possible in ignition key position 1.

Press the keys in the order illustrated (HEAT ON or VENT OFF).

90 On-board computer



The on-board computer can be operated from ignition key position 1 onwards.

The on-board computer can be used to call up and display information which contributes towards safe, economical driving.

The button with the clock symbol can be used to

call up the time and date program in an hourly reminder signal (memo), e.g. to remind you that the news is about to be broadcast or operate the independent heater/ventilation system.

For further details and notes on operation of the digital clock, see page 85.

Display without previous inputs

Page

1 CONSUM 2	Two average fuel consumptions	91
RANGE	Probable range before refuelling	91
SPEED	Average speed	92

Displays with previous inputs

DISTARR

Distance before destination is reached, with time of arrival

92

LIMIT

Speed limit

93

CODE

Code

94

For reasons of driving safety, always input data to the computer before starting your journey or when the car is at a standstill. The computer calculates and memorises data from the start of the journey onwards.

It is possible to display information from the Check Control in the instrument cluster, even by remote control; refer to page 95.

On-board computer



Average fuel consumption

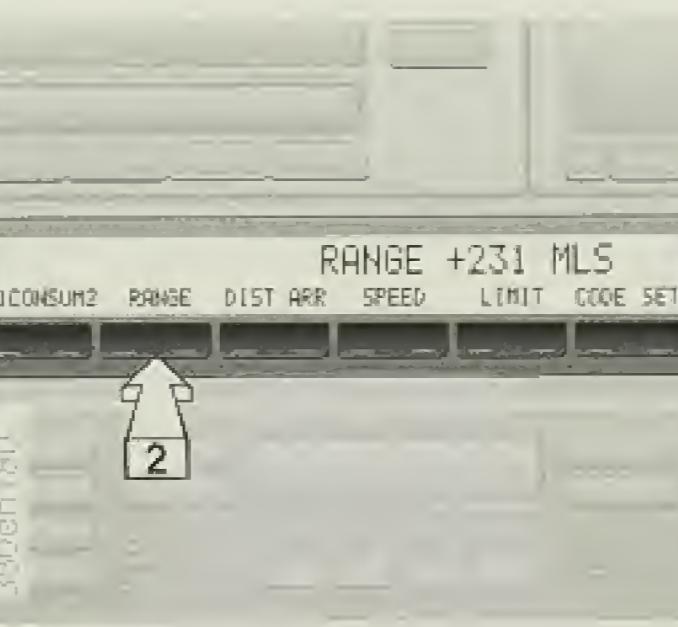
Average fuel consumption can be computed in parallel for two different distances, for instance a complete journey and one section of the journey.

To start computing for distance 1: Press the keys in the order illustrated.

To start computing for distance 2: Same procedure as for the distance 1, but press CONSUM 2 to select.

This calculation starts when your car sets off.

To display: Press BC and CONSUM 1 and/or 2 button.



Probable range before refuelling

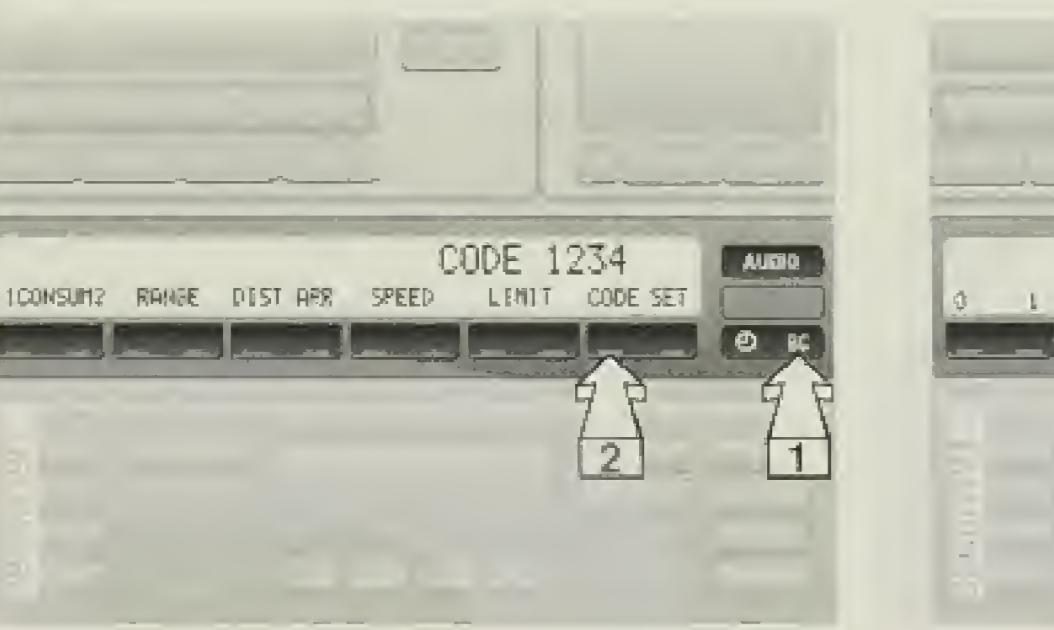
This display indicates how far the car can probably be driven on the fuel remaining in the tank. The fuel level is measured and the range calculated on the basis of the way in which the car has so far been driven. The average fuel consumption over the last 30 kilometres (approx. 20 miles) serves as a reference value for this purpose.

To display: Press the keys in the order illustrated.

A probable range below 50 kilometres (30 miles) is shown in the Check Control display on the instrument panel.

The car should then be refuelled as soon as possible, as the engine and catalytic converter could otherwise become damaged.

The on-board computer registers fuel added to the tank if the quantity exceeds 5 litres (approx. 1.1 gal).



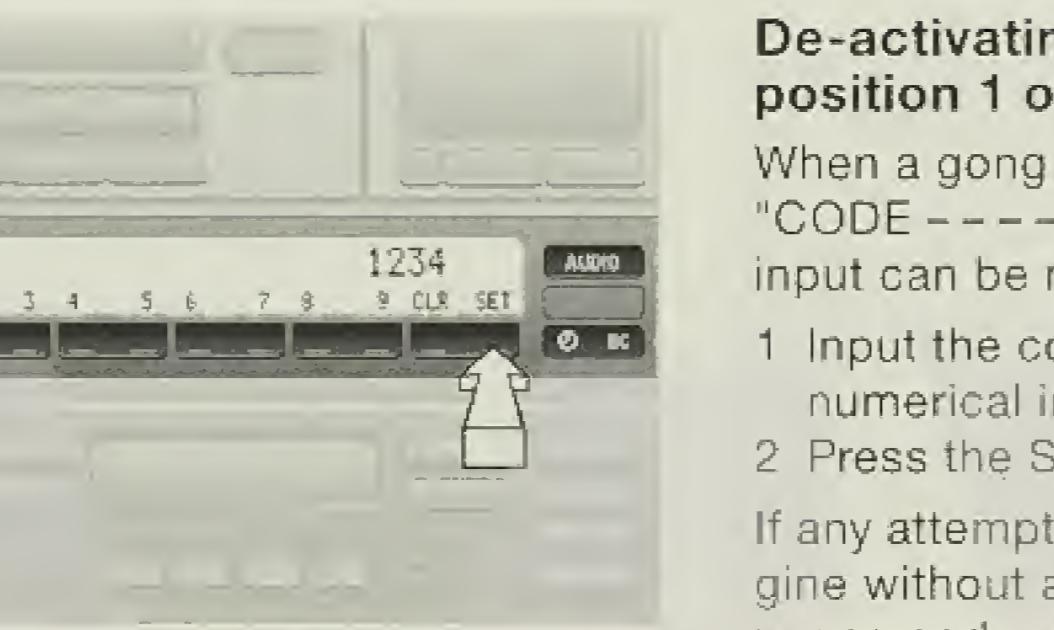
Code

In addition to the electronic immobilizer (see page 30), the engine can be prevented from starting and the car thus protected against unauthorised use by entering a code in the on-board computer.

Attempts to start the engine are not successful.

The device is activated by means of a code number input. Starting the engine is then impossible unless the same code number is subsequently input correctly. For this reason: always remember the code number!

Press the keys in the order illustrated.



Activating in ignition key position 1

Enter the code using keys 0 – 9, press the SET key and turn ignition key to setting 0 and remove.

Numerical codes from "0000" to "9999" can be entered. (The same or a different code number must be input each time the device is activated.)

Numerals keyed in to the system can be corrected by pressing the CODE key or, in the case of individual numerals, by pressing the CLR key.

De-activating in ignition key position 1 or 2

When a gong signal is heard and the "CODE ----" display seen, the code input can be made.

- 1 Input the code number at the numerical input keys
- 2 Press the SET key.

If any attempt is made to start the engine without a code input, or if the wrong code number is input, the engine will not start.

If the correct code has been entered and confirmed with SET, the time is automatically displayed.

After three incorrect code inputs, the alarm is sounded for 30 seconds on cars with an alarm system.

If the code number has been forgotten, proceed as follows:

- 1 Disconnect the battery (the alarm will sound on cars with an alarm system), wait approx. 2 minutes and then reconnect it
- 2 Turn the ignition key to position 1
- 3 A time display will appear and run down for 10 minutes
- 4 After 10 minutes, the engine can be started.

On-board computer

If the code number becomes available again during this 10-minute waiting period, it can be input after the CODE key has been pressed.



Remote control

Using the switch on the lever for the direction of travel indicator, you can display all on-board computer and digital clock information in the Check Control in the instrument cluster.

Input:

- 1 Press the switch in the flashing turn indicator lever in until the display reads "PROG 1"
- 2 Press the buttons on the MID in the appropriate order for the information you require.
- The program number appears in the display for each input
- 3 Press the SET key.

If you wish all the information to be accessible:

- 1 Press the switch in the flashing turn indicator lever in until the display reads "PROG 1"
- 2 Press the SET key.

To display:

Press the flashing turn indicator lever in briefly.



Park Distance Control (PDC)*

PDC is a parking aid for the driver. Audible warning signals indicate when the car is approaching an obstacle. Four ultrasonic sensors in the front and four in the rear bumper measure the distance to the next solid object. The measuring zone for the four front sensors and the two rear corner sensors extends approx. 60 cm (2 ft) from the bumper. The range of the measuring zone for the two central sensors at the rear is approx. 1.50 m (5 ft).

In ignition key position 2, the system is activated automatically after approx. 1 second when reverse gear is selected or the automatic transmission selector lever moved to R. It is switched off when the lever is moved out of reverse gear or away from position R. If the

car is towing a trailer, the rear sensors clearly cannot supply sensible signals and therefore remain switched off. When the telltale light in the button (arrow) is on, the system is activated.

It can be switched on and off manually at the button (arrow) on the centre console (telltale light comes on or goes off as appropriate). If the car is driven for more than approx. 50 metres (160 feet) or reaches a speed of approx. 30 km/h (20 mile/h), the system is shut down and has to be reactivated when required.

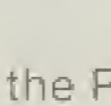
Audible warning signals

The distance from an obstruction is indicated by a higher-pitched intermittent signal tone at the front and a lower one at the rear. The closer the car approaches the obstruction, the more rapid the sequence of signals. When the distance is less than 30 cm (approx. 12 in), the signal becomes continuous.

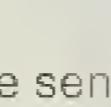
The signal is interrupted if the distance from an obstacle remains constant for more than approx. 3 seconds, for instance when driving parallel to a wall.

Any malfunction is indicated by a short, continuous tone and the flashing telltale (or by the telltale only when the system is activated by engaging reverse or selector lever position R).

Switch the system off and have the fault rectified by BMW Service.



Despite the PDC, you are still responsible for assessing the presence of any obstacles. The sensors have certain "dead areas" in which objects cannot always be detected. Furthermore, the limits of the ultrasonic detection principle may be reached, for example if the obstruction is thin, with a painted surface (for example a trailer towbar or another vehicle's projecting trailer tow hitch). ◀



Keep the sensors clean and free of ice to ensure that the system continues to function correctly. Do not spray the sensors with steam jets for any length of time. Keep at least 10 cm (approx. 4 in) away from the sensors. ◀

Electronic Damping Control (EDC)*



Sport program

With the ignition key in position 2, press the EDC button (arrow); the telltale light next to the S will come on.

The Sport program should be selected if you require a firmer response from the suspension in all operating situations.

To change over to automatic control: Press the button again; the telltale light will go out.

This system automatically ensures that movement of the road wheels is damped according to the car's needs, and therefore enhances both ride comfort and safety.

Automatic adjustment

Automatic adjustment is activated each time the engine is started. It takes effect over the entire road-speed range and regardless of the load on the car. If the influencing factors change (road surface quality or operating conditions such as steering, braking etc.), the damping action is modified automatically in a fraction of a second to suit the new situation.



Automatic Stability Control plus Traction (ASC+T)/Dynamic Stability Control (DSC)*

These systems improve roadholding, particularly when accelerating and cornering.

The DSC extends the benefits of ASC+T (optimum roadholding when accelerating and setting off combined with optimum traction) to maintain roadholding benefits in the transverse dynamic range (cornering) within the limits of what is physically possible.

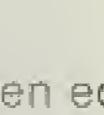
The systems are active whenever the engine is started.

Telltale light

The telltale light in the instrument cluster goes out shortly after the engine has been started. See page 16.

To switch off the system:

Press the button; the telltale light will come on.



When equipped with DSC, the button is labelled with the letters DSC.◀

When the ASC+T/DSC systems are switched off, you can drive in conventional mode. It is advisable to switch off the system to improve traction:

- if the car has to be rocked out of a hollow or a soft surface, or started in deep snow or on a loose surface
- if snow chains are fitted.

See also page 156.

To switch the system on again:

Press the button a second time; the telltale light will go out.

If the telltale light flashes:

The system regulates drive forces in response to drive status.

If the telltale light does not go out after the engine has been started or comes on during the journey:

The system is defective, but the car itself is fully operational with the exception of the ASC+T/DSC stability control function. Please visit BMW Service for repair work.

Operating principle

Extremely responsive sensors monitor the speeds of rotation of the road wheels and in the case of DSC also the steering lock angle, lateral acceleration, braking pressure and the car's movement round its vertical axis.

If differences in the wheel rotating speeds are detected by the system, there is a risk of wheelspin occurring, and the power input is therefore reduced; in addition, the rear wheel brakes are applied if necessary.

If an unstable driving condition is detected by DSC, the front brakes may also be applied in order to stabilise the car.

The driver may find it difficult initially to grow accustomed to the action of the system. However, it ensures the best possible forward traction and dynamic stability at all times.

When the brakes are applied by the system, some noise will be heard.



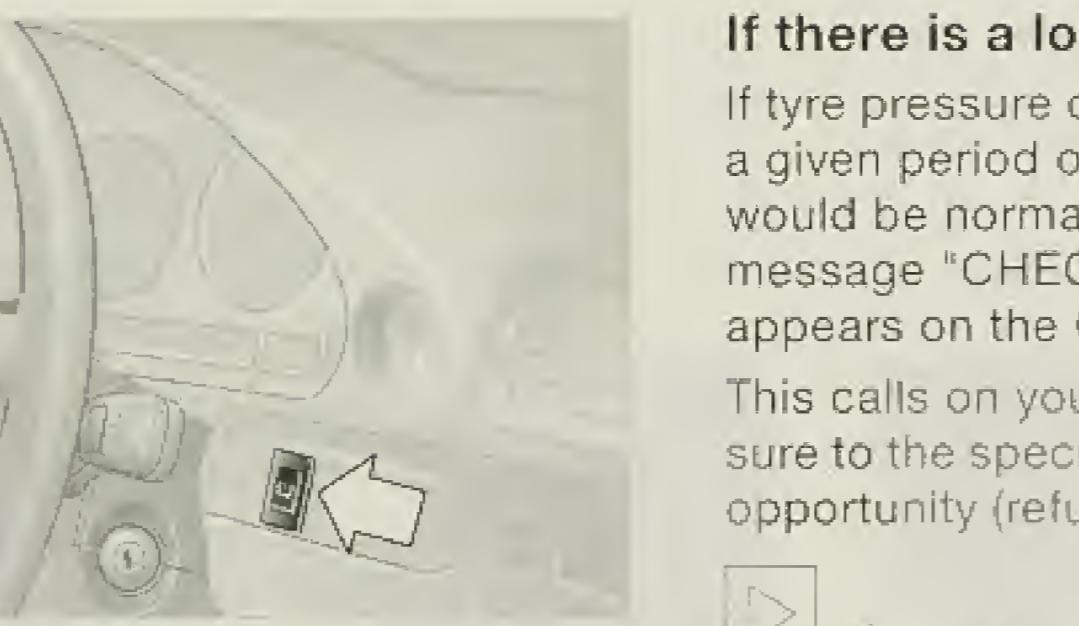
Even with ASC+T/DSC, the laws of physics cannot be overcome. If the limit speed is exceeded, the driver is responsible for any consequences of poor traction and lateral guidance. The extra safety potential offered by this system must never be understood as an invitation to take additional risks. To ensure full functionality from your system, only use tyres of the same make and tread pattern.◀

The principle

The RDC system (in preparation) checks the tyre pressure of all four wheels, even while in motion. The system reports any significant drop in the pressure of one or more tyres.

To enable the RDC to "get to know" the tyre pressure, check the pressure in all tyres, compare with the tyre pressure table on page 26 and correct if necessary. Then activate the system.

The Check Control informs you if the tyre pressure is not normal.

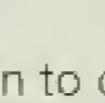


Activating the system

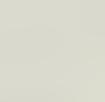
- 1 Turn the ignition key to position 2
- 2 Press down the button (arrow) until the Check Control presents the message "SET TYRE PRESSURE". The RDC has then accepted the pressure in the tyres as the nominal value it has to monitor.

If there is a loss of tyre pressure

If tyre pressure drops too sharply after a given period of time (more than would be normal on that tyre), the message "CHECK TYRE PRESSURE" appears on the Check Control display. This calls on you to correct tyre pressure to the specified values at the next opportunity (refuelling stop).

 If you are called on to check tyre pressure shortly after correcting it, this would indicate that the corrected pressure levels were not plausible. In this event, please check the tyre pressure once again and correct it to the level specified in the tyre pressure table. ◀

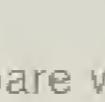
 The RDC cannot announce sudden damage to tyres in advance if this is caused by external factors. ◀

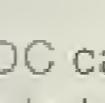
 Have tyres changed by your BMW Service. Your BMW Service is fully informed about RDC and is equipped with the necessary special tools. ◀

In the event of a burst tyre

If a tyre bursts and pressure is lost, Check Control displays the message "TYRE DEFECT". In addition, a gong sounds.

When this display appears, immediately slow down to a complete stop, but avoid any abrupt use of brakes or steering wheel. Replace the defective wheel.

 The spare wheel fitted as standard to your vehicle is equipped with the necessary electronics and it is also monitored when the system is activated. ◀

 The RDC cannot announce sudden damage to tyres in advance if this is caused by external factors. ◀

 Have tyres changed by your BMW Service.

Your BMW Service is fully informed about RDC and is equipped with the necessary special tools. ◀

Faults

The RDC can suffer from brief interference caused by outside equipment or devices which use the same radio frequency.

While this interference is affecting the system, Check Control displays the following message "TYRECONTROL INACTIVE".

You obtain the same display in response to a system fault or whenever a wheel is fitted without corresponding electronics. Consult BMW Service if necessary.

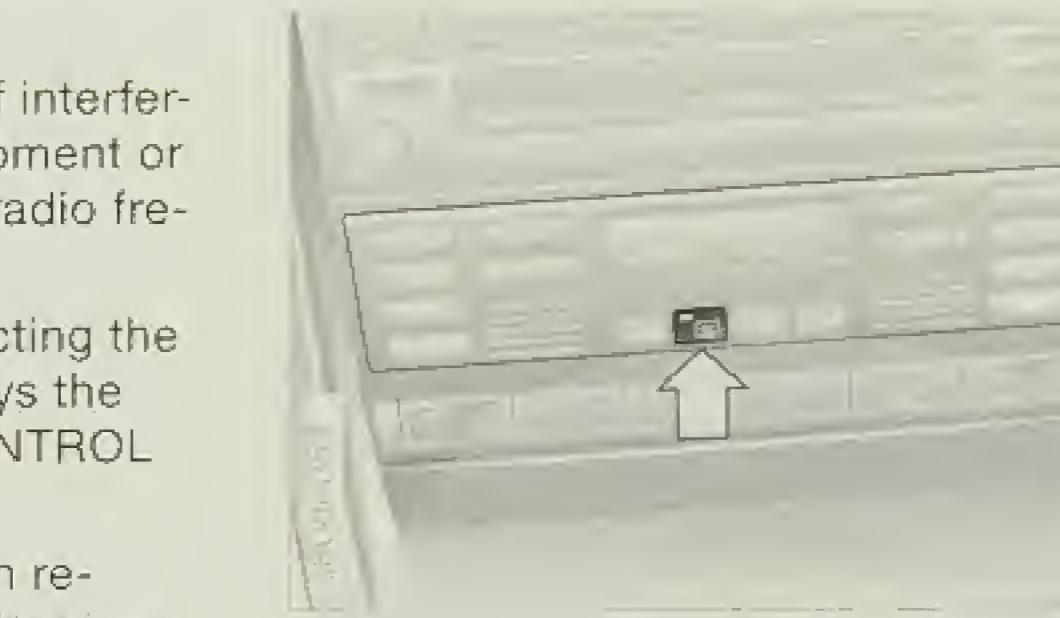
Switching on

Press the button: when the taillight light is on, the heated rear window is operating at full heat output (rapid defrosting).

When the taillight light goes out, the heating continues to operate for a certain time at reduced power, then automatically cuts out.

Switching off

If the taillight light is on, press the button.



102 Independent heater*

If your car has an independent fuel-burning heater, it is also equipped with independent ventilation control. Cars are also supplied with independent ventilation control only.

Both systems are operated by the MID or the on-board monitor, refer to page 88 or separate instruction manual.

Two different switch-on times can be preselected, so that you can be sure that the car's interior is warm when it is next entered. Snow and ice are also easier to remove from the windows.

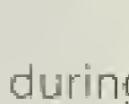
The independent heater runs for 30 minutes. It can also be switched on and off directly in ignition key position 1. Since its current consumption is high, it should not be run twice in succession unless there has in the meantime been an opportunity to recharge the car's battery by driving the car.

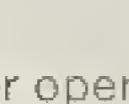
The independent fuel-burning heater can be operated at outside temperatures below 16 °C if the switch-on time is preselected, or switched on directly at any outside temperature. This only applies when the car is driven, however, until the engine has reached its regular operating temperature.

The heated air is directed automatically to the windscreens, side windows and footwells; maximum heating output is always used.

In ignition key position 1 you can vary the interior temperature, airflow volume and air distribution at the heater, ventilation and air conditioning controls.

After it has been switched off (LED off) the independent heater continues to run for a short period.

 Even during the warmer season of the year, you should switch on the independent heater once a month, run it for about 5 minutes, then switch it off again.◀

 Never operate the independent heater in confined spaces. Always switch off the independent heater before refuelling the car.◀

In ignition key position 1, the airflow volume and air distribution are adjusted in the same way as for independent heating.

Independent ventilation

This system supplies air to the interior and lowers its temperature by means of the automatic air conditioning fan.

Two different switch-on times can be preselected; the ventilation system then runs for 30 minutes. It can also be switched on and off directly in ignition key position 1. Since its current consumption is high, it should not be run twice in succession unless there has in the meantime been an opportunity to recharge the car's battery by driving the car.

Independent ventilation control can be operated at any outside temperature above 16 °C if the switch-on time is preselected, or switched on directly at any outside temperature, but not when the car is being driven.

Air emerges from the variable-flow, controlled-direction outlets for the upper body zone on the fascia. These outlets must therefore remain open if the independent ventilation system is to be used.

In ignition key position 1, the airflow volume and air distribution are adjusted in the same way as for independent heating.

Independent heater remote control

3 Push the aerial back in, but only after the first three regular flashes have been seen.

Switching off

- 1 Extend aerial 2 fully
- 2 Press button 4. The telltale light flashes three times and then goes out
- 3 Push the aerial back in.

 The range is at its most favourable if you hold the transmitter vertically or horizontally. When switching on and off, do not touch the aerial or point it at the car. The remote control only activates the independent heating system if this is not already in operation (preselection or direct engagement).◀

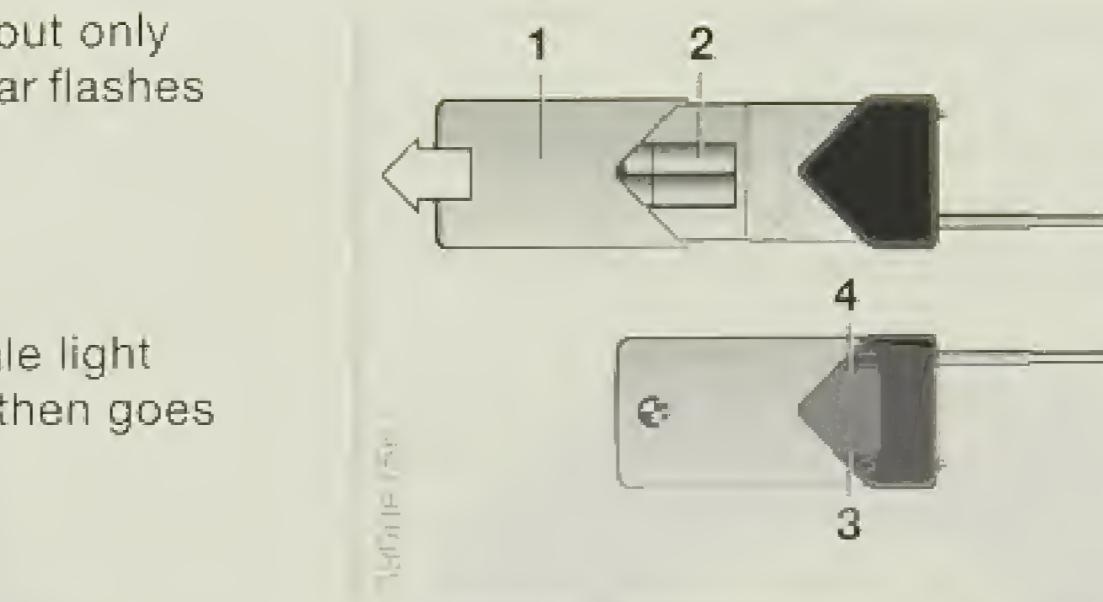
You can switch the independent heater on and off with the remote control handset provided that the outside temperature is below 16 °C. The reception signals are sufficiently strong for the remote control to operate on average at a range of up to 350 m (approx. 1150 ft).

Interference

The remote control handset can suffer from impaired function due to local or outside equipment or devices which use the same radio frequency.

Switching on

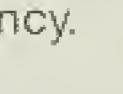
- 1 Extend aerial 2 fully
- 2 Press button 1. Telltale light 3 flashes regularly three times and then emits brief, rapid flashes for the remainder of the switch-on period (max. 30 min)



Batteries

Renew the batteries if the telltale light no longer flashes when the independent heater is switched on.

- 1 Pull open cover 1 for battery compartment
- 2 Insert two batteries of the same type as before (LR 1). Battery type and correct installed position are marked on the base of the battery compartment
- 3 Press the cover back into position.

 Dispose of old batteries at an official collecting point or hand them back to BMW Service.◀

New transmitter

If you commission a new transmitter (replacement or second transmitter), it must be initialised first. No more than two transmitters are possible.

 Comply precisely with the following times, otherwise the initialisation process will not be successful and you will have to repeat it.◀

- 1 Remove the fuse for the independent heater (fuse box in engine compartment, see page 140) and insert it again after 10 seconds
- 2 Within 3 seconds of having inserted the fuse again, press button 3
- 3 Next, press button 4 within 5 seconds
- 4 After a further 3 seconds, the system is operational.



To open: pull the handle; the light inside will come on.

If necessary, the glove box can be swung out after opening, to provide better access from the driver's seat. (This is not possible in right-hand-drive cars because of the fuses installed in the glove box.)

To fasten: swing back in, then shut the lid.

To lock: use a master key, or push the small lever behind the glove-box handle to the right with your finger; it can then only be unlocked with the master key.



Close the glovebox immediately after use, otherwise this can cause accidents and injury.◀

Rechargeable hand lamp

This is inside the glove box, on the left.

The lamp is protected against overcharging and can therefore remain in the socket when it is not in use.



Only insert the lamp in the connector while switched off, otherwise an excess charge might damage the unit.◀

106 Storage compartments



Hinged compartment on left at side of steering column:

To open the compartment, press the recessed area at the top; fold up the lid to close.

Front compartment on sloping face of centre console:

To open, press the recessed area at the top; press shut to close.

This compartment is also available with a cassette or CD holder as optional extras.

Compartment on centre console between front seats:

To open, reach into the recess and pull up.

If a telephone is installed, there are compartments at the sides of the telephone. To open, press the button at the side.

There is a rotating coin holder* on the right beneath the radio flap; on cars with the non-smoker package* it is also available instead of the front ashtray.

There are further storage compartments in all the doors and on the front seat backs.

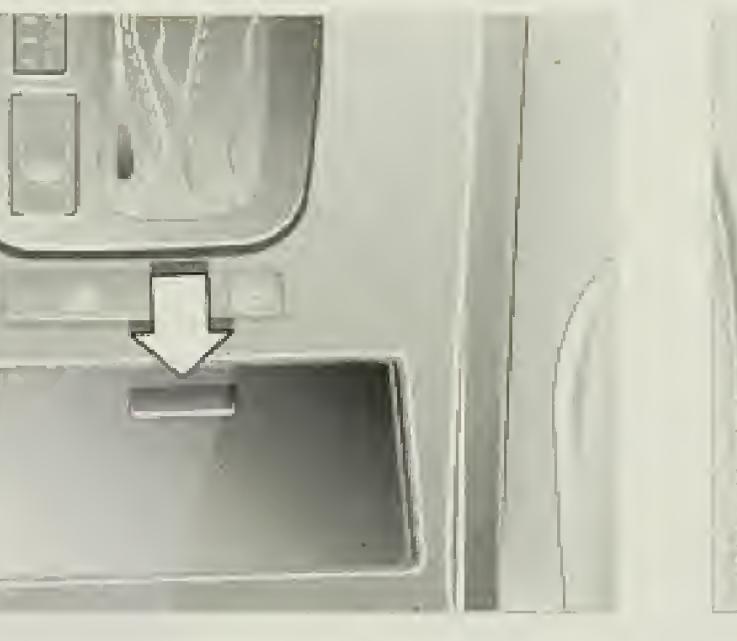
Cup holders



There are two holders for cups or drink cans in a compartment at the front of the centre console and also in the front of the centre section of the rear seat.

To open, touch the recess at the top (arrow); to close, push the front panel back in.

Ashtrays



To open:

Press down at the recessed area (arrow).

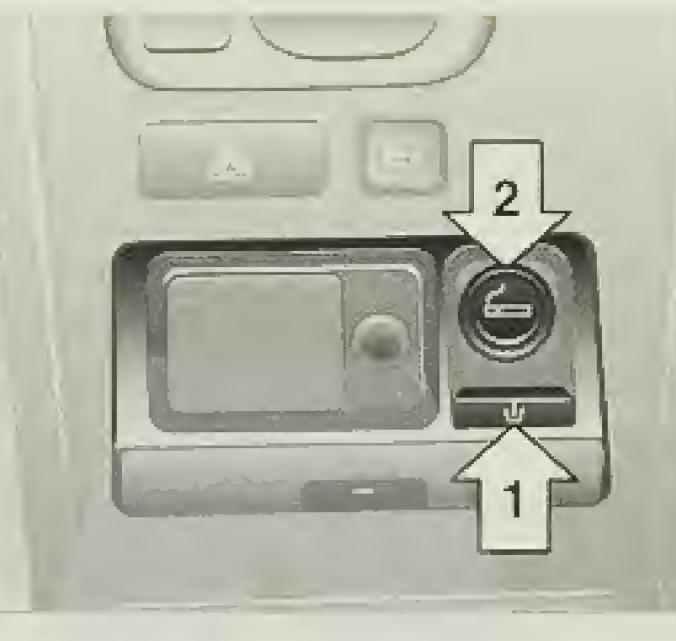
To extinguish a cigarette, knock off the ash and insert a short distance only.

Cigarette lighter*

Press in to operate (arrow 2). The cigarette lighter can be removed when it pops back out.

Cigarette lighter socket

It can be used as a socket for torches, car vacuum cleaners or similar items up to approx. 200 W at 12 V. On cars with the non-smoker package*, take off the protective cap. Make sure that the socket is not damaged by attempting to insert plugs of the wrong pattern.



To empty:

Press button (arrow 1): the ashtray will pop up and can be removed.



Rear ashtray

To open: press down at the recessed area at the top.

To empty, pull out the insert.

Cigarette lighter for rear passengers

At the end of the centre console.

 Hold the hot cigarette lighter only by its knob, or else you may suffer burns.

The lighter can then be used when the ignition key is removed.

For this reason, never leave children in the car unsupervised. ▲



Opening and closing windows

From ignition setting 1:

press the rocker switch in until the pressure point is felt.

The window moves while you are holding down the toggle switch. Press the toggle switch over beyond the pressure point:

The window then continues to move automatically.

To stop the movement, press down the switch.

After switching off the ignition:

You can continue to operate the window regulators for up to 15 minutes provided that none of the front doors are closed again. To open, press the rocker switch beyond the normal pressure point.

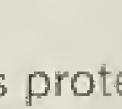


Always remove the ignition key when you leave the vehicle to prevent (e.g.) children from operating the window regulators and perhaps injuring themselves. ◀

For comfort operation via door lock or radio remote control, refer to page 31 and/or page 36.

Protective function

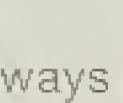
There is a contact strip along the upper edge of each window frame. If anything becomes pressed against this contact strip while a window is being closed, the closing movement is immediately interrupted and the window re-opens a short distance.



You can disable this protective function (e.g. unauthorised access from outside) by pressing the switch beyond its pressure point and holding it down. ◀

Safety switch

This can be used to prevent operation of the rear windows from the rear switches, e.g. by children.



Always press down the safety switch if children are travelling in the back. Unsupervised closure of the windows could cause injury. ◀



Always close the slide/tilt sunroof in a controlled manner to prevent physical injury.

Always remove the ignition key when you leave the car to prevent (e.g.) children from operating the sunroof and perhaps injuring themselves. ◀

No vacuum effect or draughts will occur while the sunroof is open or raised provided that you keep the air supply open (air vents), and perhaps increase the airflow rate.

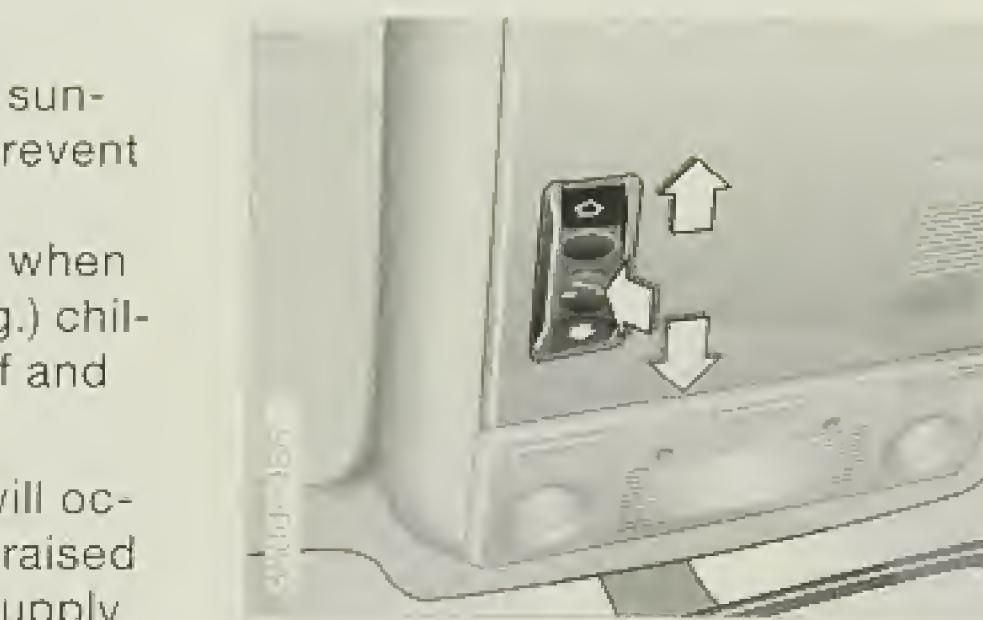
For convenient closing using the door lock or the remote control handset, refer to page 31 or page 36.

Protective function

If the slide/tilt sunroof encounters any resistance from about the half-open position, the closing operation is interrupted and the roof opens slightly.



You can disable this protective function (e.g. in the event of unauthorised access from outside) by sliding the switch beyond its pressure point and holding it down. ◀



Raise - Open - Close

From ignition setting 1, press down on the switch or slide in the desired direction up to the pressure point.

When raising, the roof line only retracts for a short distance.

You can operate the sunroof for up to 15 minutes after switching off the ignition, provided that neither of the front doors is closed again.

110 Slide/tilt sunroof*

Automatic* opening and closing

Push the switch out beyond the pressure point.

In addition, the following movements are automated:

when the roof is open, push the switch towards "Raise": The roof moves to the limit position for "Raise"

when the roof is raised, move the switch towards "Open": The roof moves to the limit position for "Open"

When you press the switch, this movement stops.

Sunroof with glass panel*

Functions and operation as for Slide/tilt roof described above. To open the roof from the raised position, hold the switch in the opening direction until the roof has reached the desired position.

The sliding visor is retracted slightly when the roof is tilted, and travels with the roof panel when it is slid open. It remains in the open position and can then be adjusted manually as desired.



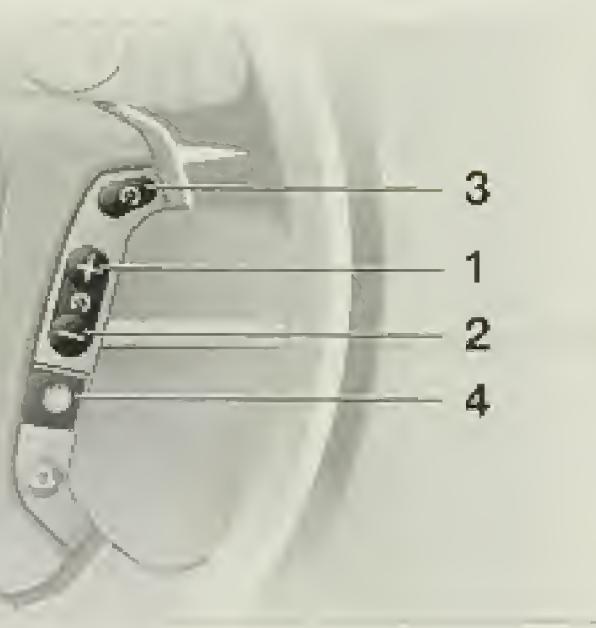
Interruption to power supply or fault

In the event of the power supply being interrupted (for example if the battery is disconnected), the roof can initially only be raised. To remedy this,

- 1 bring the slide/tilt roof to the fully raised position
- 2 keep the switch depressed for about five seconds longer.

In the event of an electrical fault, the slide/tilt sunroof can be operated manually, refer to page 149.

Cruise control



1 Maintaining and memorizing a speed/accelerating

Pressing the key briefly: the car's actual speed is maintained and memorised. Each time the switch is operated briefly again, road speed is increased by approx. 1 km/h (approx 0.6 mph).

Holding the key in: the car accelerates without the accelerator pedal being touched. As soon as the switch is released, the speed then reached is maintained and memorized.

2 Decelerating

Pressing the key briefly:

Every time you press the button, road speed reduces by approx. 1 km/h (approx 0.6 mph), assuming you are already using the cruise control.

Switching off the system: Press button 4 again; the telltale remains lit. You can use the cruise control again when required.

De-activating system: When the system is switched off, press button 4 once again. The telltale goes out and the stored road speed is cancelled.

3 Calling up road speed

Press the button: the speed last memorised is recalled and maintained once it has been reached again. Whenever you turn the ignition key in setting 0, the road speed stored in memory is cancelled and the system is de-activated.

4 Activate/Off/De-activate

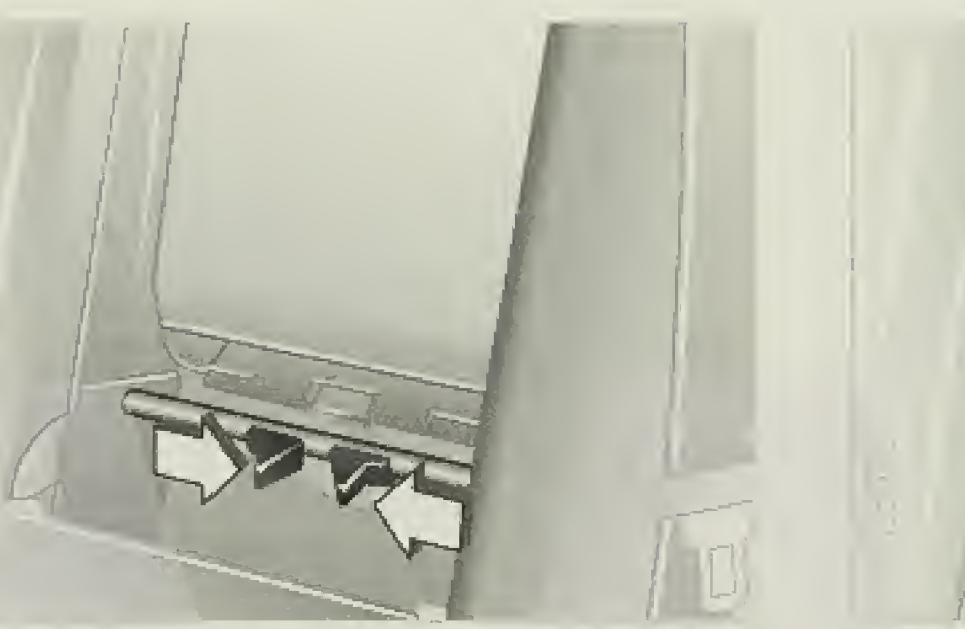
In this sequence, you can alter the system status every time you press the button.

The cruise control is also switched off automatically:

- when you brake
- when you depress the clutch or move the automatic transmission selector lever from D to N and on the BMW 728i/L - 750i/L if the car exceeds the selected speed by approx. 16 km/h (10 mph) for more than 30 seconds.
- on the BMW 725td if the car exceeds the selected speed by more than 16 km/h (10 mph) or drops below it by more than 20 km/h (12.5 mph).

Three or a maximum of four pairs of skis can be carried safely and without being exposed to dirt.

By using the full length of the ski bag and the remaining space in the luggage compartment, skis up to 2.10 m (6.8 ft) long can be carried. If more than one pair of skis are carried in the ski bag, its effective capacity is reduced at the point where it becomes narrower, so that no more than two pairs of 2.10 m (6.8 ft) long skis can be carried.

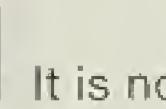


Inserting items into the ski bag

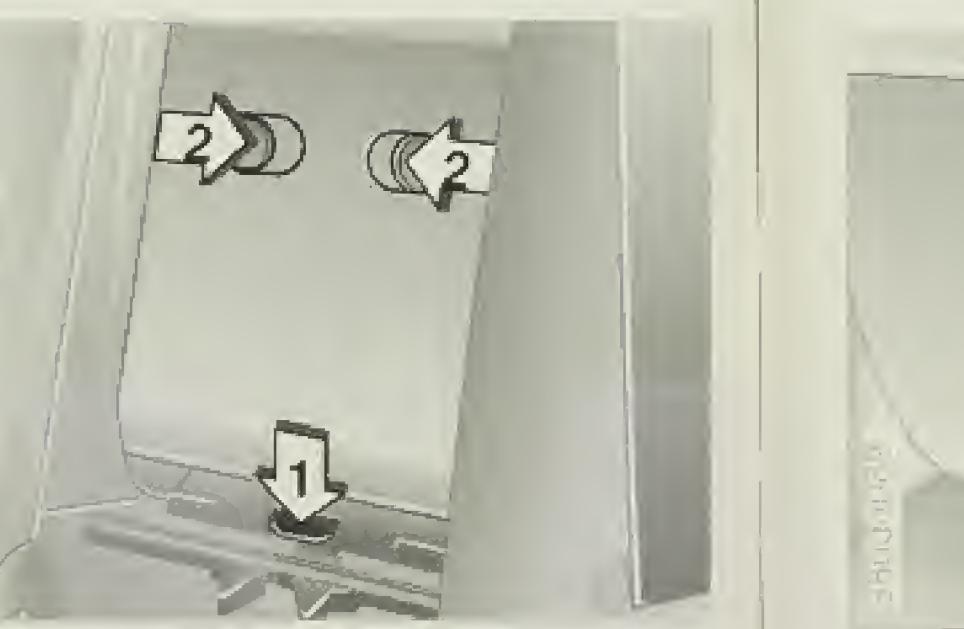
Fold down the centre armrest, detach the trim at the upper burr fastener and place it on the armrest.

Lowering the centre armrest

Lift up the armrest slightly at the front and squeeze together the two levers (arrows): the armrest can now be lowered on to the seat surface.



It is not always necessary to lower the central armrest before loading a ski sack.◀



Press the button (arrow 1): this will release the loading flap in the luggage compartment.

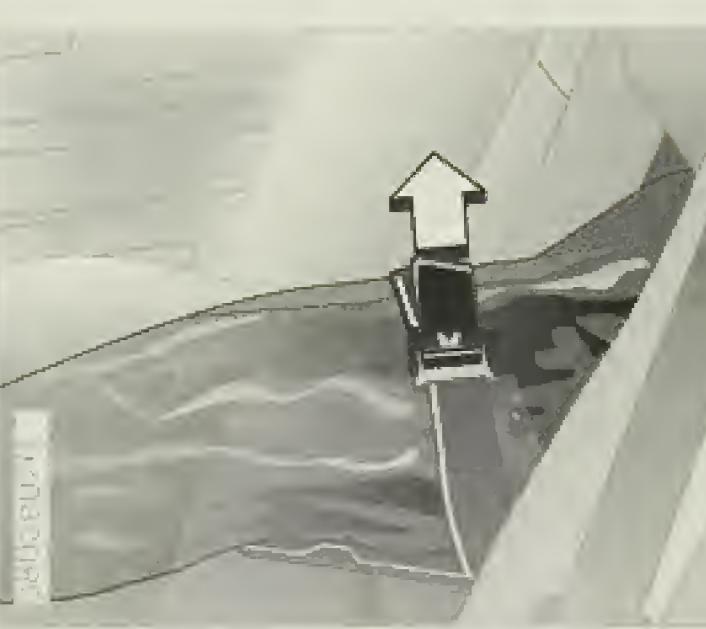
Squeeze the lock levers together (arrow 2) and fold the cover down forwards.

Lay out the ski bag between the front seats. It has a zip fastener for better access to the items inside, and for use when the bag needs to be dried out.



From the luggage compartment side, attach the cover flap to the underside of the rear-window shelf with the magnetic holders provided.

Make sure that the skis are clean before they are inserted into the bag, and that any sharp edges on them or their bindings do not damage or pierce the ski bag.



Secure the skis or any other stored objects with the retaining strap on the ski bag. Tighten the turnbuckle to ensure that the retaining strap is taut.

To stow away the ski bag, follow the opposite procedure. The centre armrest automatically returns to its original position when folded up.

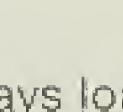


Securing the load

Small and light items can be retained with the tensioning straps, a load-area net* or other suitable straps (see page 35)

BMW Service can supply suitable means of lashing and securing larger or heavier loads*. To secure these lashings, eyes are located down each edge of the load area (refer to picture)

Please note the information supplied with load securing equipment.



Always load luggage correctly and secure it to prevent it from posing a threat to occupants when braking hard or taking evasive action. The permitted gross vehicle weight and the permitted axle loads (refer to page 184) must not be exceeded otherwise the vehicle's roadholding is impaired and you would be breaking the law. Do not place heavy or hard objects in the passenger area, or they may be flung forward during heavy braking or if the driver swerves to avoid an obstacle, and endanger the occupants.◀

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Operating hints

Care and maintenance

Technical data

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**Brakes:**

Do not rest your foot on the brake pedal while the car is in motion. Even slight continuous pressure on the brake pedal could cause overheating, brake pad wear or even brake system failure.

Aquaplaning:

Reduce speed when driving on wet or slushy roads, since a wedge of water could otherwise build up between the tyres and road. This situation, known as aquaplaning, means that the tyre can actually lose contact completely with the road surface, so that the car can neither be steered nor braked properly.

Water on the roads:

When there is water on the roads, only drive through up to a depth of max. 30 cm (12 in), at no more than walking pace, otherwise you may damage the engine, electrical system and transmission.

Rear-window shelf:

Never place hard or heavy objects on the rear window shelf; they could be dislodged when the car is braked heavily and endanger the occupants.

Coat hooks:

When hanging clothing from the hooks, do not obstruct the driver's view. Do not hang heavy objects from them, to avoid the risk of personal injury if the car is braked suddenly. ▲

Catalytic converter

The catalytic converter reduces the pollutant content of the exhaust gas.

Cars with a spark-ignition engine must be run on unleaded petrol.

Even a very small amount of lead will permanently damage the oxygen sensor and catalytic converter.

To ensure that the engine always operates correctly and reliably, and to avoid damaging it, the following instructions should be complied with:

- always have the specified maintenance work performed.

- do not run the fuel tank dry.
- stop the engine at once if it misfires.

- never tow-start the car unless the engine is cold, or else unburned fuel may reach the catalytic converter. It is better to jump-start the engine from another car's battery.
- avoid any other situations in which fuel remains unburned or is only partially burned, for example:

- running the starter motor too frequently or for excessively long periods in rapid succession if the engine does not start (though the engine can of course be stopped and restarted at any time if it is running correctly). Running the engine with a spark plug lead detached.

Catalytic converter

Always observe the above precautions to ensure that unburned fuel cannot reach the catalytic converter.

Otherwise the catalytic converter may overheat and be damaged.

High temperatures occur on all vehicles equipped with a catalytic converter. Never remove the heat shields protecting the exhaust system, nor apply underseal to them. Make sure that

no flammable materials (e.g. straw, hay, leaves, grass etc.) come into contact with the hot exhaust system when the car is being driven or parked, or is stopped with the engine idling. If the above materials catch fire, severe injury and damage could occur. ▲

Car radio operation

The reception and reproduction quality of an AM/FM radio system depends on its distance from the desired transmitter and also on aerial alignment.

Interference from high-tension overhead wires, but also buildings and natural obstructions, may cause noise and signal deterioration which cannot be avoided even if the vehicle's own interference suppression systems are in good working order.

Climatic influences such as sunspots, fog, rain or falling snow also influence radio reception.

Car or portable phones not recommended by BMW may cause interference when in use. This may take the form of low-frequency hum from the loudspeakers.

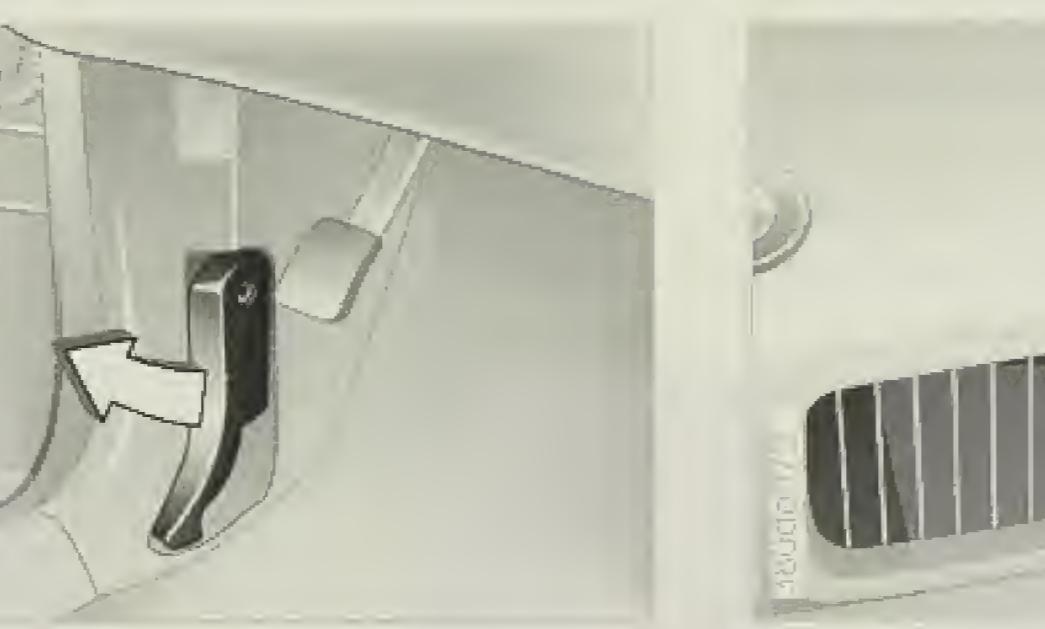
Operating and tuning of your car radio are described in the separate instructions accompanying this handbook.

Mobile communication systems (car telephones, two-way radio etc.) can cause interference if they are not approved for use in your car. Since BMW cannot examine and test each product, it is unable to accept any responsibility for the installation of items it has not approved. Before purchasing any such system you are recommended to obtain advice from BMW Service.

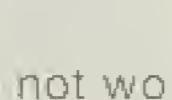
In order to safeguard your BMW's operating reliability, do not operate any in-car telephones or other mobile radio equipment with an aerial inside the car or not fitted to the car's exterior.

 Remove telephone aerial before loading on to car-carrying trains, and before driving through a car wash. 

Engine hood

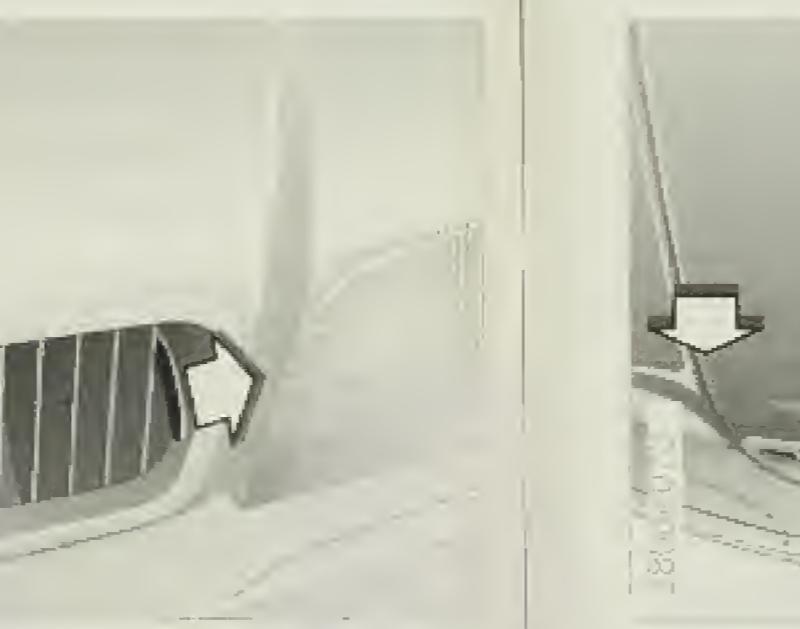


Releasing: Pull the lever at the left under the fascia.

 Do not work on your car unless you really know what you are doing. Before working in the engine compartment, switch off the engine and allow it time to cool.

Before working on the electrical system, always disconnect the battery first. For any work on the car at all, comply with instructions and manuals.

If you do not know which specifications apply, have the work carried out by BMW Service, otherwise unprofessional handling of parts and materials may constitute a safety risk for yourself at the time, and for other road users afterwards. 

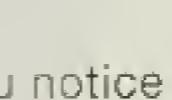


To open: pull the release lever and open the lid.

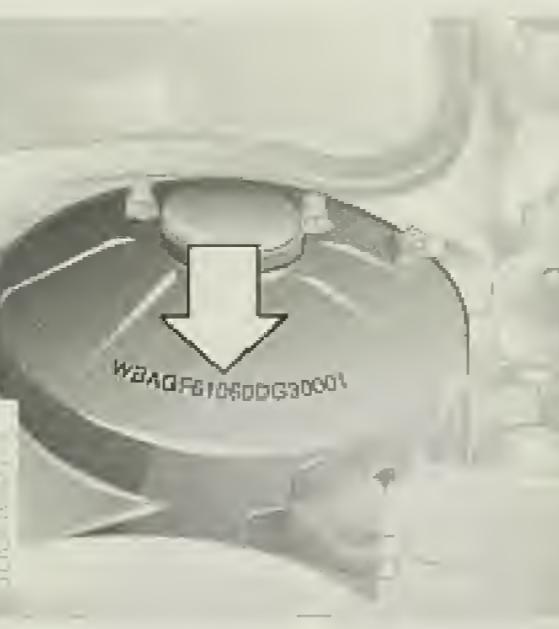
Engine hood



To fasten: Press both sides of the hood panel down at the same time until it is heard to engage.

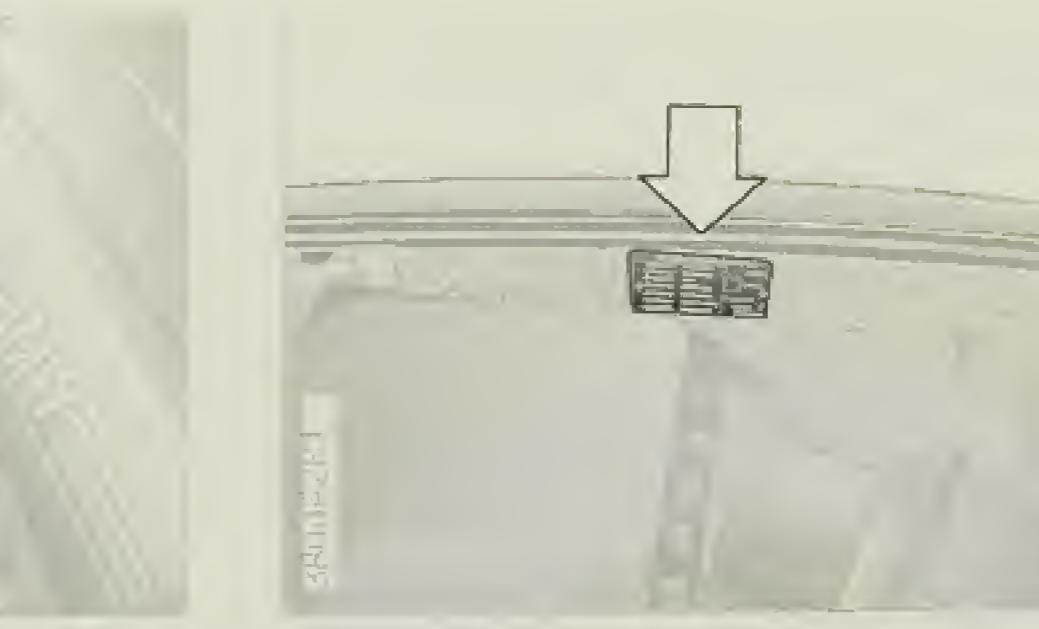
 If you notice during the journey that the engine compartment has not been properly closed, stop the car at the earliest possible moment and close it correctly. 

Identification number



In the engine compartment, on the left spring strut mounting (arrow).

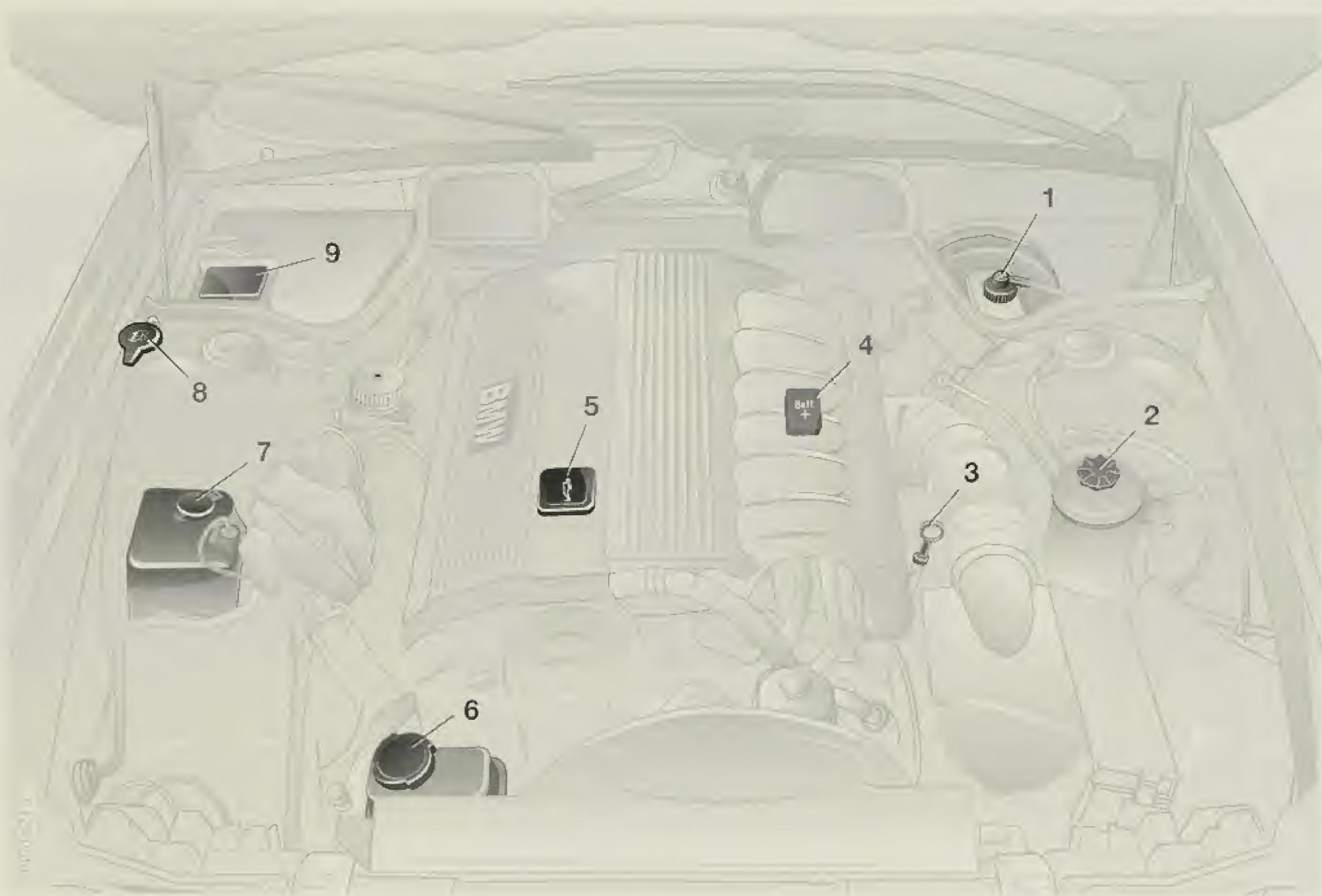
Type plate



In the engine compartment on the right side panel, and possibly also on the top left side of the dashboard*. The data on the type plate must agree with those in the car's documents.

The car's data are needed as a reference for all queries, checks and spare part orders.

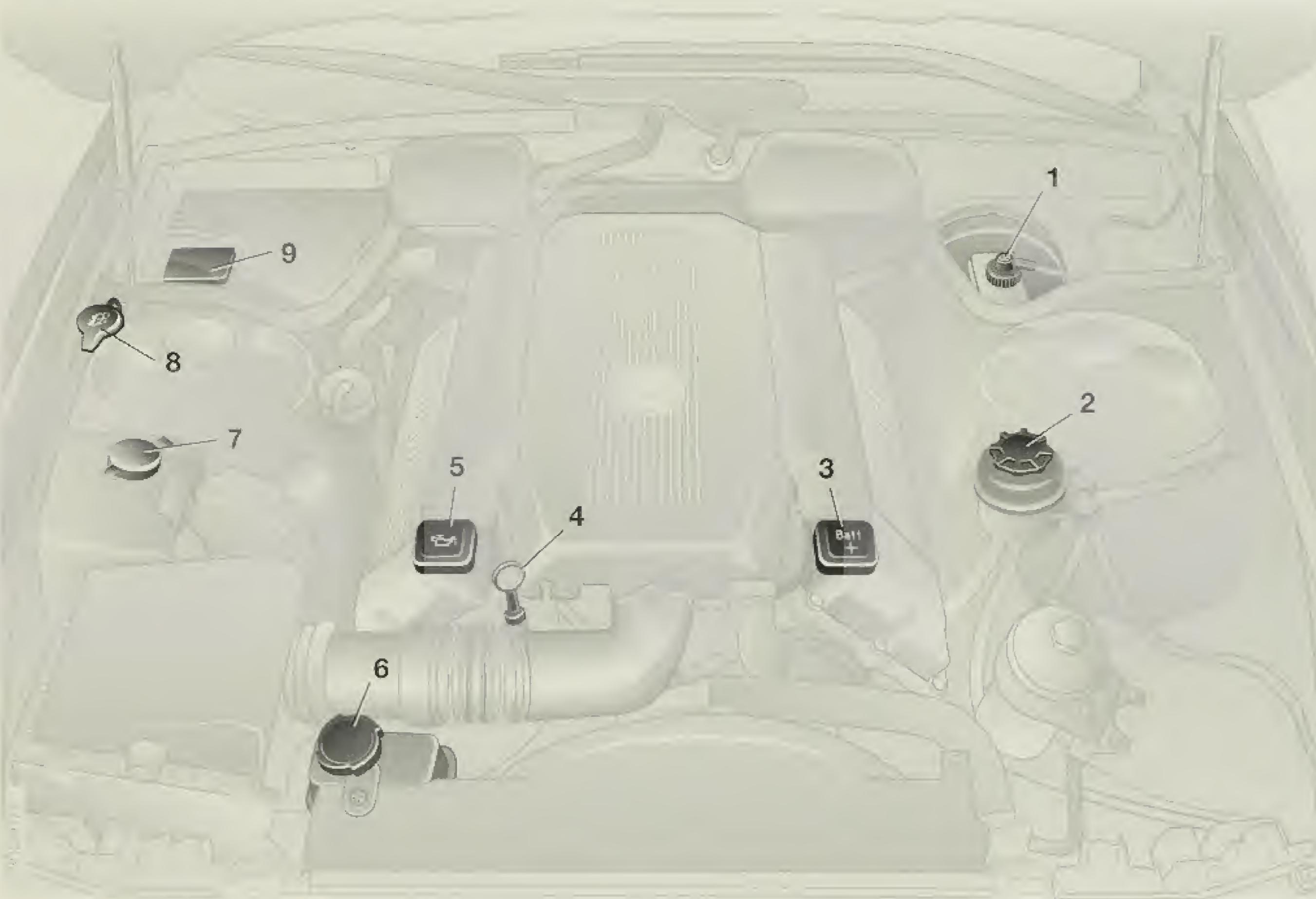
122 Engine compartment – BMW 728i/L



123 Engine compartment – BMW 728i/L

- 1 Brake fluid reservoir 134
- 2 Oil tank for power steering/ self-levelling suspension 133
- 3 Engine oil dipstick 130
- 4 Jump-starting point 144
- 5 Engine oil filler cap 130
- 6 Coolant level equalising tank 134
- 7 Reservoir for intensive cleaning system 136
- 8 Reservoir for headlight cleaning system/windscreen washer 136
- 9 Fuse box 140

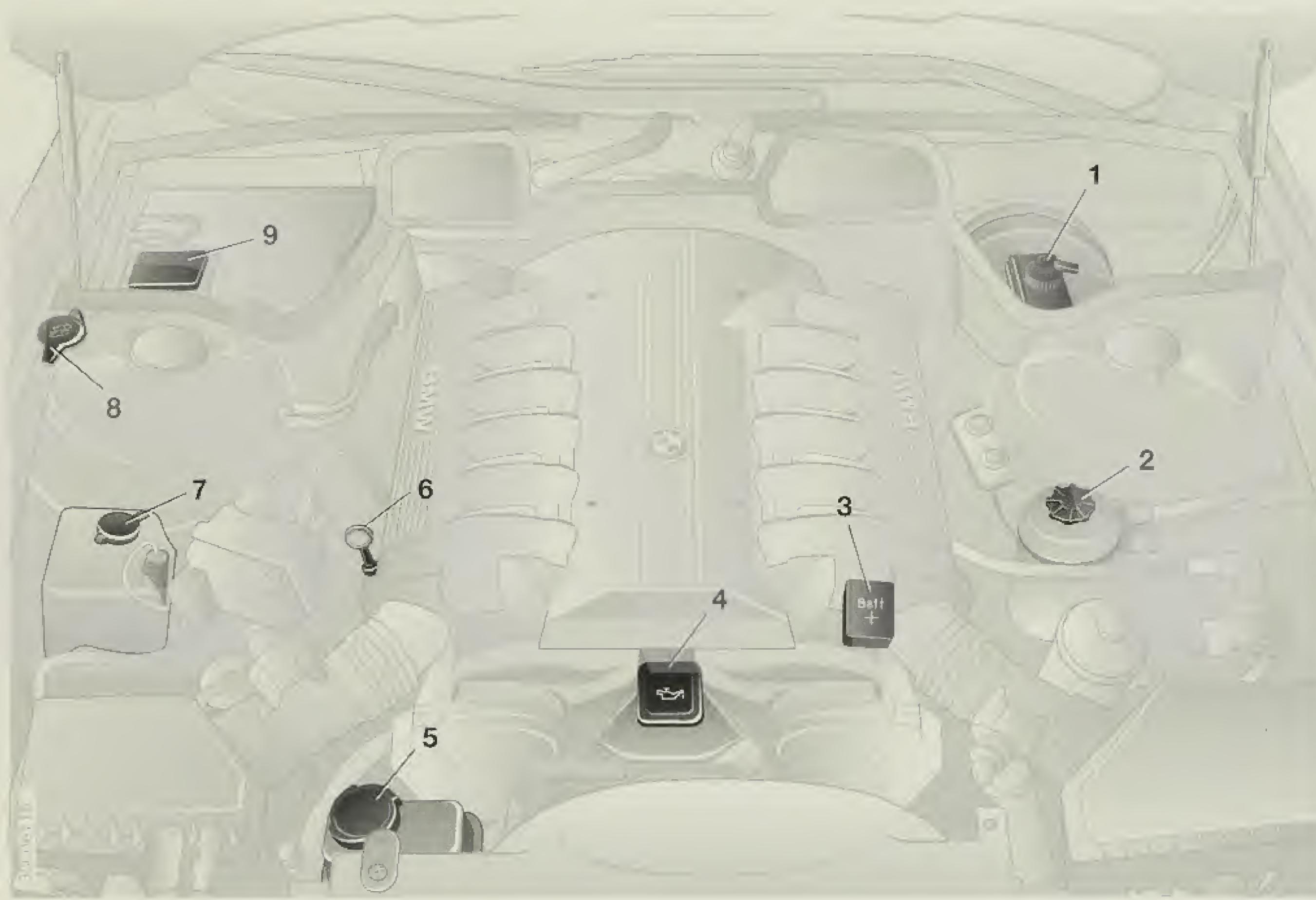
124 Engine compartment – BMW 735i/L, 740i/L



125 Engine compartment – BMW 735i/L, 740i/L

- 1 Brake fluid reservoir 134
- 2 Oil tank for power steering/
self-levelling suspension 133
- 3 Jump-starting point 144
- 4 Engine oil dipstick 130
- 5 Engine oil filler cap 130
- 6 Coolant level equalising
tank 135
- 7 Reservoir for intensive
cleaning system 136
- 8 Reservoir for headlight cleaning
system/windscreen washer 136
- 9 Fuse box 140

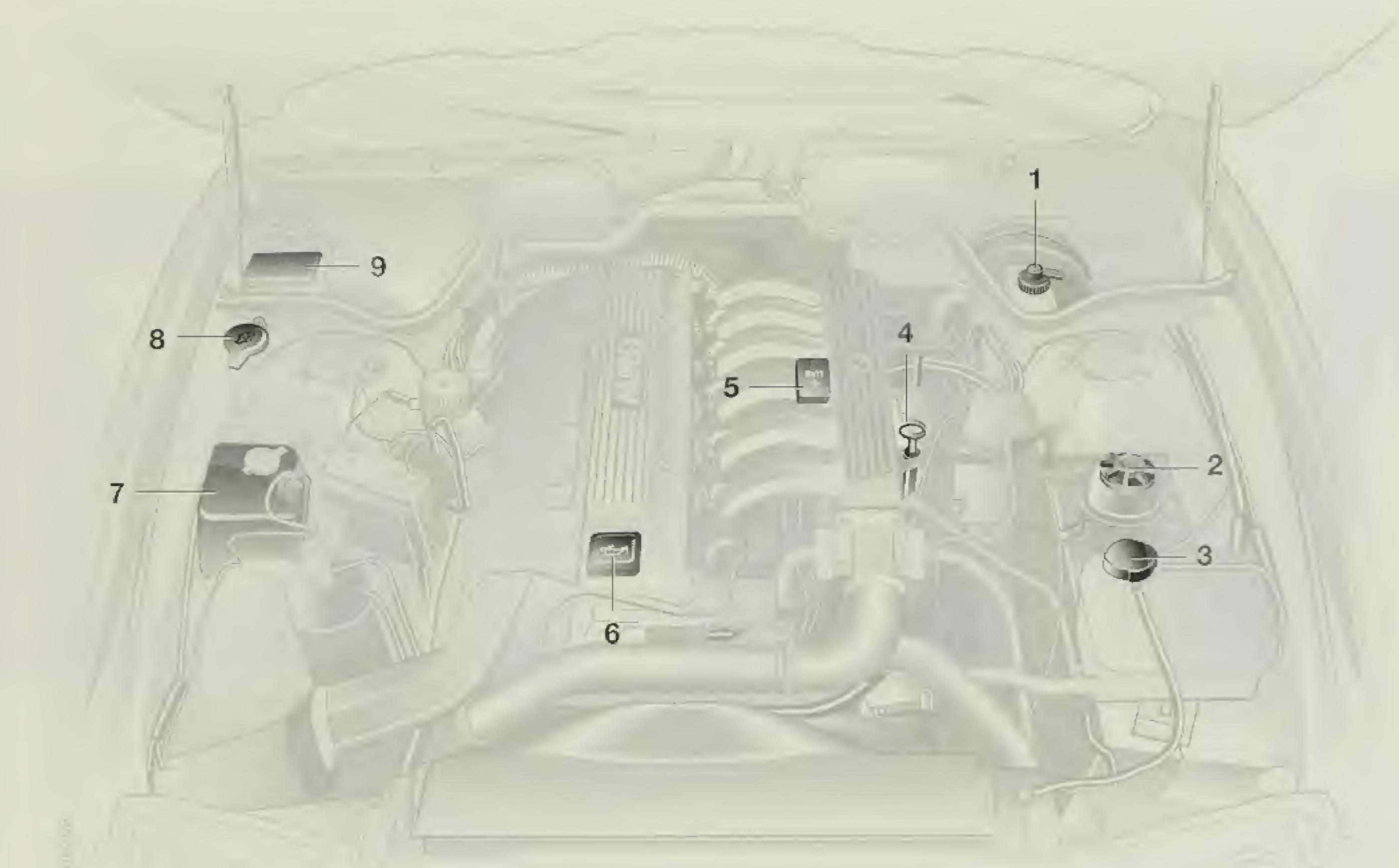
126 Engine compartment - BMW 750i/L



127 Engine compartment - BMW 750i/L

- 1 Brake fluid reservoir 134
- 2 Oil tank for power steering/ self-levelling suspension 133
- 3 Jump-starting point 144
- 4 Engine oil filler cap 130
- 5 Coolant level equalising tank 135
- 6 Engine oil dipstick 130
- 7 Reservoir for intensive cleaning system 136
- 8 Reservoir for headlight cleaning system/windscreen washer 136
- 9 Fuse box 140

128 Engine compartment - BMW 725tds



129 Engine compartment - BMW 725tds

- 1 Brake fluid reservoir 134
- 2 Oil tank for power steering/ self-levelling suspension 133
- 3 Coolant level equalising tank 134
- 4 Engine oil dipstick 130
- 5 Jump-starting point 144
- 6 Engine oil filler cap 130
- 7 Reservoir for intensive cleaning system 136
- 8 Reservoir for headlight cleaning system/windscreen washer 136
- 9 Fuse box 140



Checking engine oil level

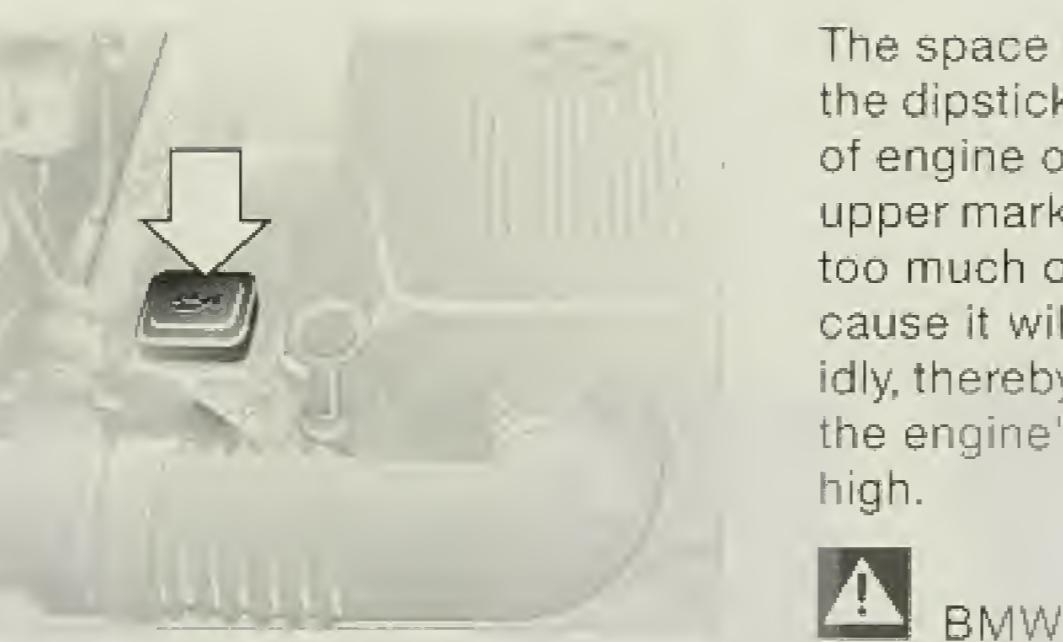
Like fuel consumption, engine oil consumption depends on driving style and operating conditions.

Whenever the message "CHECK ENGINE OIL LEV" appears on the Check-Control (refer to page 83), check the oil level with the car standing on level ground.

Maximum measuring accuracy:

- When engine is cold, before starting
- If the engine is already at its normal operating temperature, wait a short time so that the oil can drain back in the sump (for instance while refuelling).

On some models, the position of the dipstick is shown on the engine compartment diagram, refer to page 122.



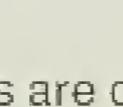
Measuring the oil level:

- Pull the dipstick out and wipe it with a non-fluffing cloth, paper tissue or similar
- Push the dipstick fully into the tube, then pull it out again
- The oil level must be between the two marks on the dipstick.

Adding engine oil

Do not add oil until the oil level has dropped to just above the lower mark on the dipstick. However, do not allow engine oil level to drop below the minimum level mark.

The space between the two marks on the dipstick is equivalent to app. 1 litre of engine oil. Do not fill beyond the upper mark on the dipstick. Adding too much oil will harm the engine because it will be burned off more rapidly, thereby implying incorrectly that the engine's oil consumption was too high.



BMW engines are constructed in such a way that oil additives are not required and can even, in certain circumstances, lead to damage. This applies to manual-shift gearbox or automatic transmission, final drive and power steering. ◀

Engine oil

Engine oil specifications

When determining oil quality, always refer to the ACEA specification. If oil to this specification cannot be obtained, refer to the CCMC or API specification.

Required quality stages:

	Use for preference:	Also permissible:
	ACEA: A2-96	CCMC-G4
	ACEA: A3-96	CCMC-G5
	ACEA: A2-96/ B2-96	CCMC-G4/ PD2
Spark-ignition engines	ACEA: A3-96/ B2-96	CCMC-G5/ PD2
	ACEA: A2-96/ B3-96	API SH
	ACEA: A3-96/ B3-96	API-SH/CD
		API-SH/CE
Diesel engines	ACEA: A3-96/ B3-96	CCMC-G5/ PD2



Diesel engines:

Engine oil must always comply with both specifications: ACEA A3-96 and ACEA:B3-96 or CCMC-G5 and CCMC-PD2. ◀

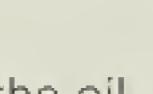
Viscosities

(Viscosity = flow capability of the oil, quoted as its SAE grade)

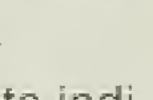
The choice of SAE grade depends on the average air temperature at the time of year.

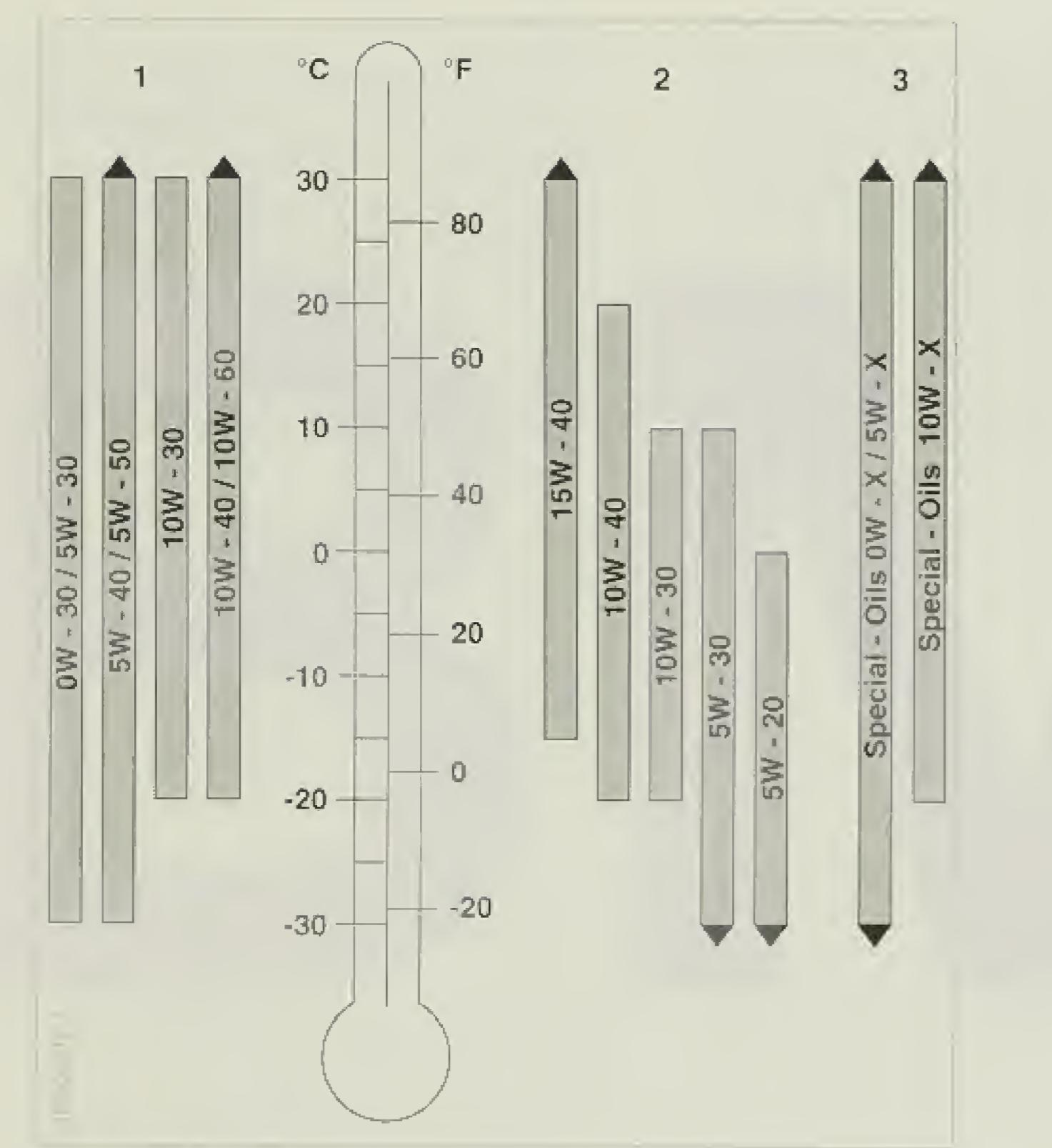
The chart on the next page indicates the correct SAE classification.

Note that the temperature limits indicated for the various SAE grades can be departed from for brief operating periods.

 When disposing of oil, please comply with the relevant environmental protection legislation. ◀

Recommendation: have oil changes performed only by a BMW Service point.

 In laboratory tests, prolonged contact with old oil has been found to cause cancer. For this reason, always wash thoroughly with soap and water. Keep all oils, greases etc. in a place which is inaccessible for children and always read and comply with any warning instructions on the containers. ◀

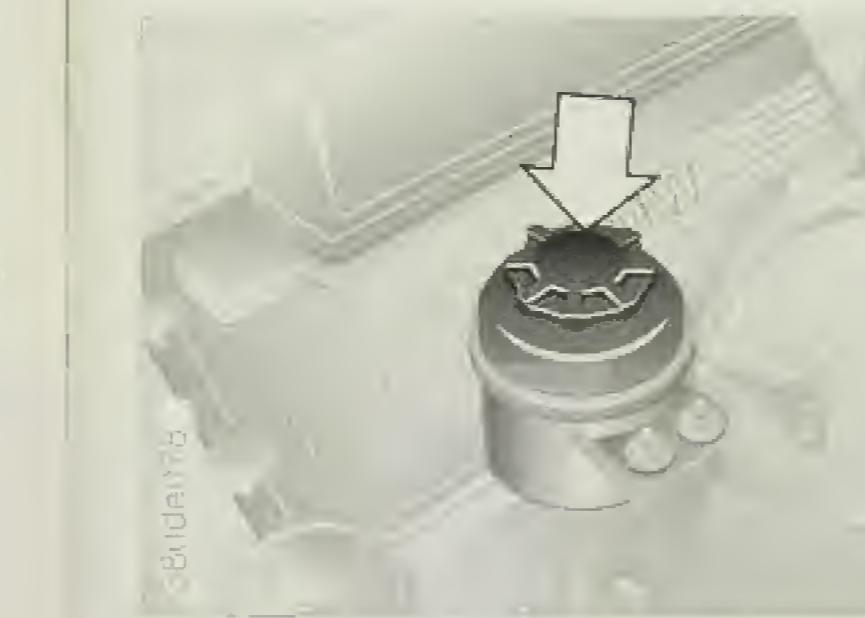


1 Diesel-engined cars:
BMW 725tds

2 Petrol-engined cars:
BMW 728i/L, 735i/L, 740i/L, 750i/L

3 Cars with diesel or petrol engine:
Details of special oils approved by
BMW in individual cases can be
obtained from BMW Service.

Oil for power steering/self-levelling suspension*



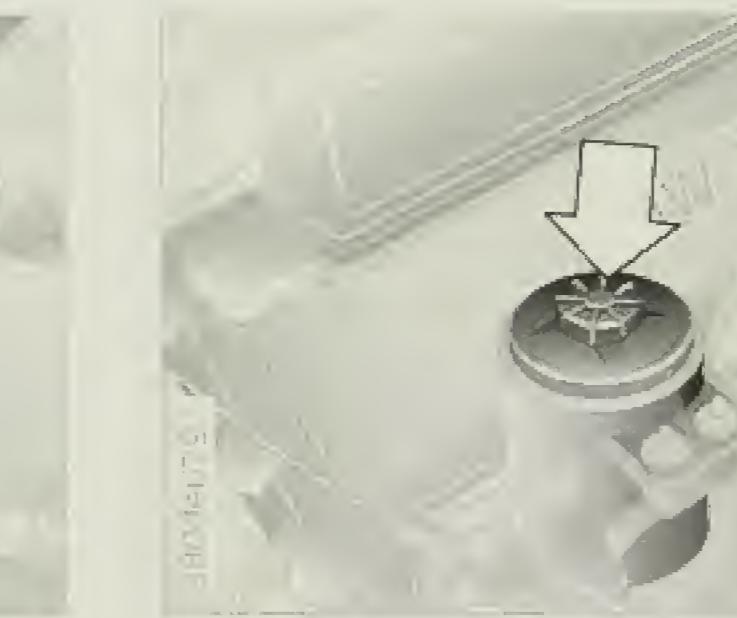
Power steering

With the engine stationary, unscrew the container lid and insert the dipstick once again with its cover, but without screwing it on.

The oil level must be between the marks on the dipstick.

After checking, screw on the container lid.

Consult your local BMW Service agent if there is a shortage of oil because only ATF (automatic transmission fluid) can be used, and specialist knowledge is required when topping up.



Power steering/self-levelling suspension*

With the engine stationary, unfasten the knurled nut and remove the container lid.

The oil level must be just above the base strainer (approx. 5 mm/0.2 in) when the car is unladen.

Correct the oil level if necessary. Use only Pentosin CHF 11S for this purpose.

Fit the container lid and tighten down the knurled nuts. Make sure that the lid is correctly seated.



If the brake hydraulics warning light comes on or the "CHECK BRAKE FLUID" message appears on the Check Control display:

Loss of fluid will increase brake pedal travel. Comply with the instructions on see page 137.

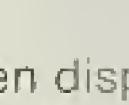
Fill to the upper "MAX" mark (level can be checked from the outside).

Details of approved brake fluids (DOT 4) are available from BMW Service.



Brake fluid is hygroscopic, i.e. it absorbs moisture from the air. To ensure that the brake system operates safely, always have the brake fluid replaced every two years by BMW Service: also refer to pages 20, 137 and in the Service Booklet.

Brake fluid is toxic and attacks the car's paintwork. Keep it in sealed original packs, out of reach of children. When disposing of brake fluid, comply with environmental protection laws. Do not spill brake fluid; fill the reservoir only up to the "MAX" mark. If brake fluid comes into contact with hot parts of the engine, it can ignite and cause serious burns. ◀



When disposing of brake fluid, comply with appropriate environmental legislation. ◀

Add to just below the KALT/COLD mark on the translucent reservoir.



6-cylinder engine

The picture shows the coolant expansion tank for the BMW 728i/L as an example. Check coolant level with the engine cold (app. 20 °C):

Unscrew the cap on the header tank. For BMW 725tds coolant expansion tank:

see engine compartment, page 128.

Correct coolant level with engine cold (approx. 20 °C):

Add to just below the KALT/COLD mark on the translucent reservoir.



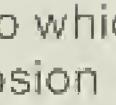
8- and 12-cylinder engines

Check coolant level with the engine cold (app. 20 °C):

Unscrew the cap on the header tank. The coolant level is correct if the top end of the red float rod is level with the top edge of the filler pipe (see arrow in illustration, or drawing on tank).

1 Turn the filler cap counter-clockwise slightly until the excess pressure has escaped, then remove it.

2 If the level is too low, add coolant slowly until the level is correct – do not overfill.



Do not open the cooling system when the engine is hot, otherwise escaping coolant can cause scalding.

To avoid the risk of subsequent damage, use only long-life antifreeze and corrosion inhibitor free from nitrites and amino compounds, and approved by the manufacturer. BMW Service points are familiar with these products.

Antifreeze and corrosion inhibitors are toxic. Store them only in the original packs, out of reach of children. Long-life antifreeze and corrosion inhibitor contain ethylene glycol, which is flammable. For this reason, avoid spilling long-life antifreeze and corrosion inhibitor on hot parts of the engine, as it could ignite and cause serious burns. ◀



When disposing of long-life antifreeze and corrosion inhibitor fluids, comply with appropriate environmental legislation. ◀

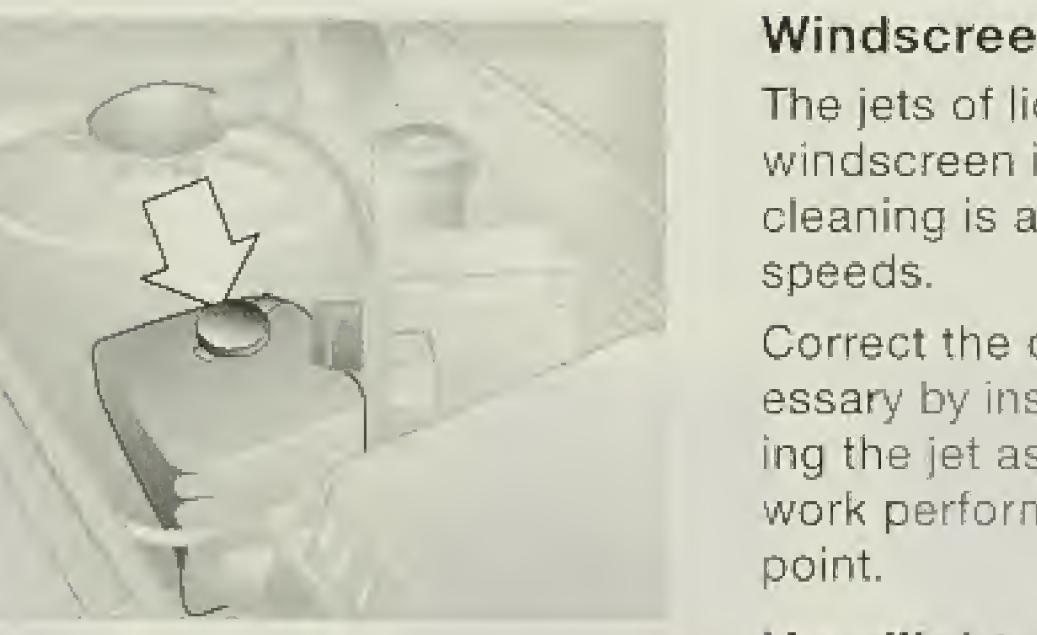


Headlight* and Windscreen washers

Capacity approx. 4.5 l (7.9 Imp. pints) for windscreen washer or approx. 6.0 l (10.6 Imp. pints) with headlight cleaning system.

Fill with water and add antifreeze if necessary (comply with manufacturer's instructions).

 It is best to mix the constituents of the washer fluid before adding it to the system.◀



Intensive cleaning system*

Content app. 1.0 litre (1.8 Imp. pints). Fill with intensive cleaning agent. This is frost-resistant down to approx. -27 °C and can be obtained from BMW Service.

Washer jets

Windscreen washer

The jets of liquid should strike the windscreen in such a way that reliable cleaning is assured even at high speeds.

Correct the direction of the jet if necessary by inserting a needle and moving the jet as required, or have this work performed by a BMW Service point.

Headlight cleaning system

Have these jets adjusted by BMW Service if necessary.

Power steering

Windscreen washer

If the steering is stiff to turn: Check oil level; see page 133.

Steering heavy during rapid steering wheel movements: have system checked by BMW Service without fail.

Special instruction for Servotronic*

If steering becomes lighter as speed increases: an electronic fault has occurred. Have it rectified by BMW Service.

 If power assistance to the steering system fails, more steering effort has to be applied.◀

Brakes

Possible malfunctions

If the brake hydraulics warning light comes on, and:

- the Check Control displays the message CHECK BRAKE FLUID, brake fluid level has dropped too low.
- if the Check Control displays the message CHECK BRAKE LININGS, the brake pads have worn down to their minimum permitted thickness.

Brake fluid level

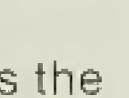
If brake fluid level in the reservoir is too low (see page 134) and brake pedal travel is noticeably longer than usual, one of the two hydraulic brake circuits may have failed.

Braking performance is still adequate with the remaining brake circuit in use.

 For your own safety, visit your nearest BMW Service point. When driving the car in this condition, note that higher brake pedal pressure and considerably longer brake pedal travel may be necessary. Modify your driving style accordingly.◀

Brake pads

If the brake pads are almost worn out (CHECK BRAKE LININGS appears on the Check Control). To replace them, visit your nearest BMW Service point at the earliest possible date.



Only use brake pads approved by BMW otherwise your road safety is at risk and your car's registration permit could be invalidated.◀

Battery



The battery is behind the right side trim in the luggage compartment (use the grip at the top of the trim to swing it down).

! Only jump start using jump start support point and earth point in engine compartment to avoid battery damage (refer to jump start equipment, page 144.)

The battery is maintenance-free to German DIN 43 539/2 standard, that is to say its acid content normally lasts for the lifetime of the battery.

If the acid level drops too low, for instance if the car is used for lengthy periods in a hot climate, top up with distilled water (not acid).

Digital Diesel Electronics (DDE)

If the message "FUEL INJECT. SYS" appears in the Check-Control, there is a fault in the electronic fuel injection system.

Except in an extreme situation where the engine refuses to run, the car can still be driven, since the engine management system has an emergency-run program. Note, however, that full performance may not be available when this program is in use. For this reason, the fuel injection system should be checked as soon as possible by BMW Service.

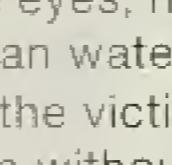
Battery

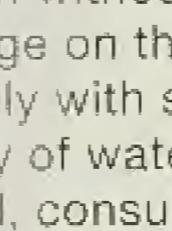
Acid level: up to the MAX mark on the outside of the battery in each cell (app. 5 mm (approx. 0.2 in) above the tops of the plates in the cells).

Keep the top of the battery clean and dry.

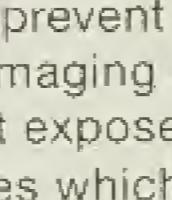
Symbols

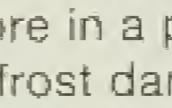
Your car's battery is marked with the following symbols. For your own safety, note the meaning of these symbols before handling or working on the battery.

 Before working on the battery, please note the following instructions.

 Always wear eye protection. No splashes of acid or particles containing lead should be skin or allowed to reach the eyes or clothing.

 Battery acid is highly caustic.

 Always wear protective gloves and goggles. Do not tilt the battery, or acid may escape from the vent holes.

 Keep the acid and the battery out of the reach of children.

Removing and installing

! Never disconnect battery cable while engine is running, otherwise vehicle electronics will be destroyed by excess voltage.

When removing the battery first detach the negative terminal, then the positive terminal.

When installing the battery, connect the positive terminal first, then the negative terminal. Loosen the threaded connections which retain the battery (see arrow in picture on page 138).

! When installing, make sure that the battery is retained securely, so that it cannot move if the car is involved in an accident.

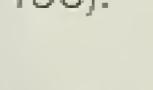
Recharging the battery

Only charge the battery in the car while the engine is stationary, using the jump start point and earth connection in the engine compartment (refer to jump starting, page 144).

! Before any work on the electrical system, disconnect negative battery terminal to avoid short circuits.

If the car is to remain out of use for more than 4 weeks, isolate the battery from the car's electrical system by detaching the negative terminal.

If the car is not to be used for more than six weeks, remove the battery, recharge it and store it in a cool place where is no risk of frost damage. Recharge the battery after 3 months at the latest, as it will otherwise be rendered useless. Every time a battery is allowed to run flat, particularly if left in this state for some time, its operating life is reduced.

 Dispose of old batteries to an official collecting point or hand them back to BMW Service. Batteries filled with acid should be transported and stored upright. Protect batteries against falling over when in transit.

! When calling for the next change of brake fluid, the Service interval indicator does not take into account periods during which the battery was disconnected.

In such cases you must ensure that the brake fluid is renewed every two years regardless of the display.



If an electrical consumer fails, switch it off and check its fuse.

The fuse box (electrical distribution box) with spare fuses, relays and plastic tweezers for fuse replacement, is in the engine compartment at the right.

On right-hand-drive cars, the fuses are in the glove box and behind the hinged cover next to the steering column.

- 1 Press the cover tabs (arrows) forwards and open the cover.
- 2 Use the plastic tweezers (stored on the inside of the cover) to pull the fuse for the defective electrical consumer out of its holder.

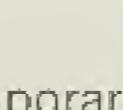
3 A blown fuse can be recognised by its melted metal wire, and should be replaced by a new fuse with the same rating in Amps.

There is a list of the fuses with their ratings in Amperes and the electrical consumers they supply next to the fuse box.

Please ensure when closing the fuse box that the cover is correctly attached.

There are additional fuses in the luggage compartment (see next column). On cars equipped for towing a trailer* there are additional fuses for the trailer lights in the trailer module, which is behind the right trim panel in the luggage compartment.

The fuse for the continuous positive terminal is located above the battery in a separate fusebox. Have this replaced in a BMW Service point if a fault occurs.



Never make temporary repairs with unsuitable materials to blown fuses, or replace them with fuses of another colour or Ampere rating, or else the electrical wiring may be overloaded and cause a fire in the car.◀

If the fuse burns out several times, have the cause of the fault rectified by BMW Service.



Fuses in luggage compartment

- 1 Fold the right side trim down with the handle provided
- 2 Pull the noise insulating material slightly to one side.

The list of fuses with ratings in Amperes and equipment connections is on the back of the side trim.

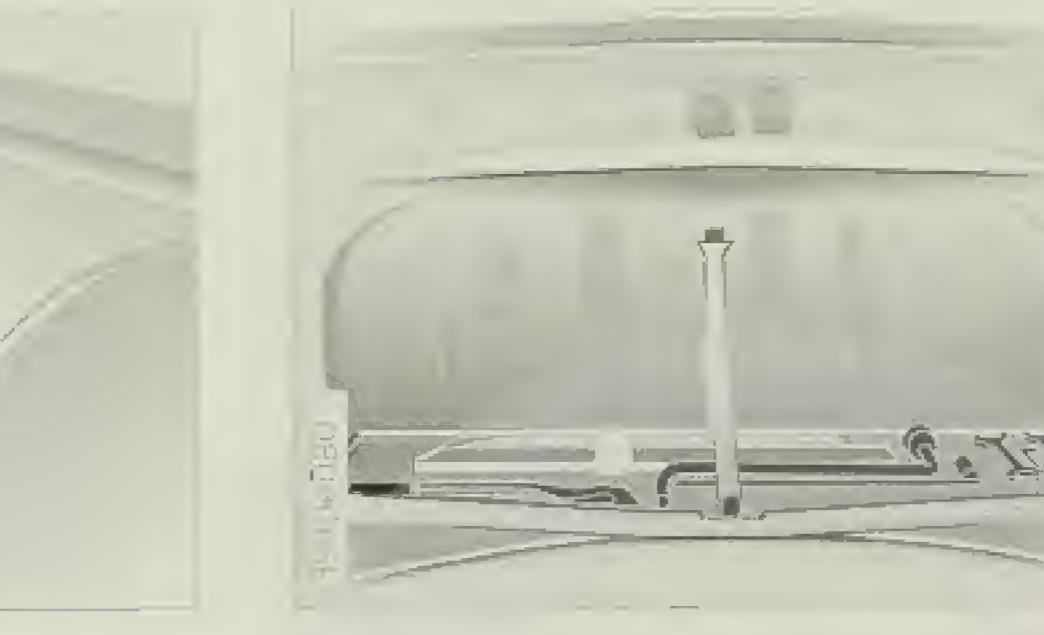


Between the rear seats. Pull the handle (arrow) and swing the cover forwards.

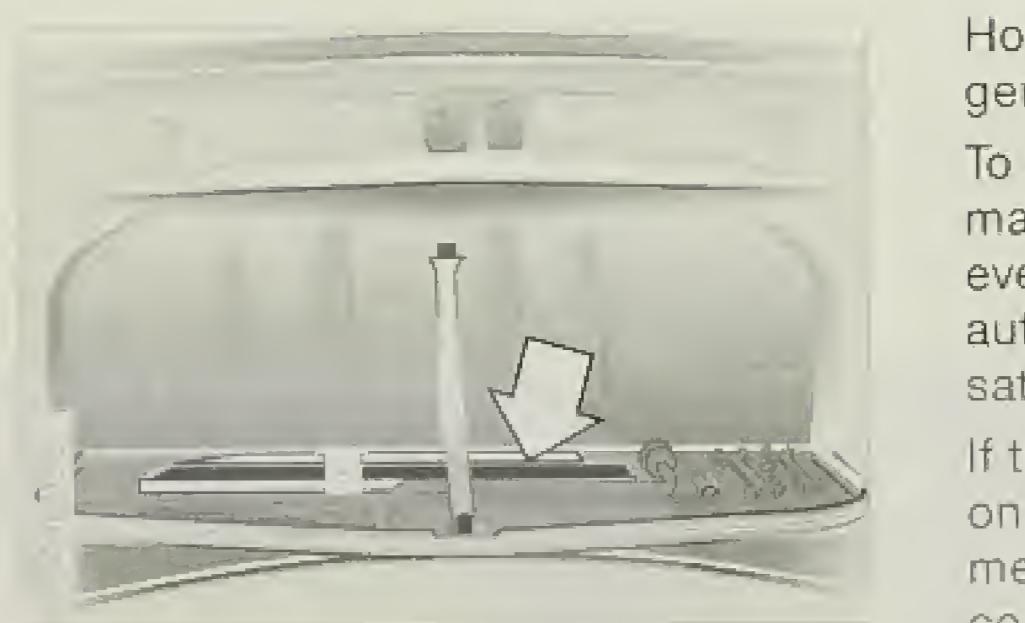
On certain equipment versions, the first aid kit is under the passenger's seat.



Various items in the first aid box have a limited "shelf life". Please check the contents regularly and renew life-expired items in good time. Replacements can be obtained from any pharmacy. Comply with legal requirements concerning the need to carry a first-aid kit in the car.◀



Under the luggage compartment lid. Accessible after loosening the wing bolt.



The warning triangle is located in an easily accessible position under the luggage compartment lid, inside the toolkit.

⚠ Comply with legal requirements concerning the need to carry a warning triangle in the car. ◀

Holder* on driver's or front passenger's seat.

To ensure that the fire extinguisher remains operational, have it checked every two years by its manufacturer's authorised after-sales service organisation.

If these service points are not listed on the extinguisher or in any documentation available to you, please consult a local trade directory or the "yellow pages" of the telephone service to obtain the address.

If you do not find satisfaction here (e.g. telephone connection or language problems), please call the Emergency Service in Munich:

National dialling code for Germany (usually 0049) 89 - 260 99 09.

You will also find a summary of the national dialling codes at the end of the directory "BMW Service in Europe".

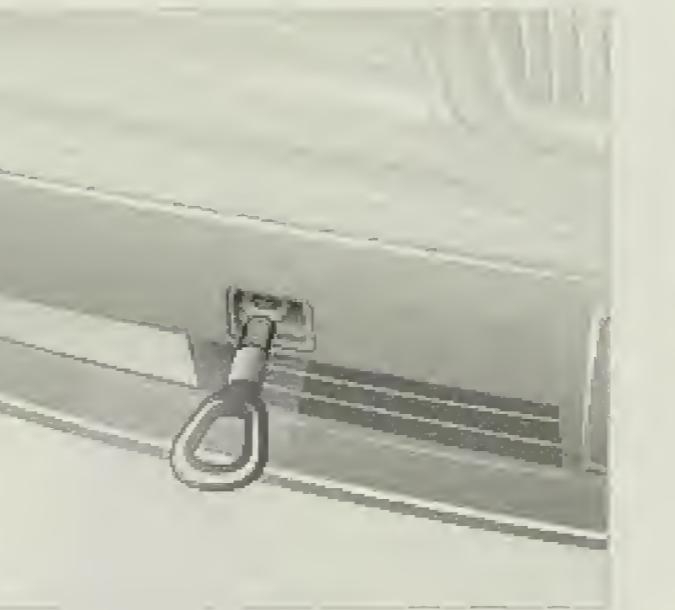
The BMW Emergency Service offers you assistance after normal working hours, on weekends and on public holidays.

If you have a breakdown, just call the BMW Emergency Service control centre for the country in which you are situated. You will find the telephone numbers at the end of the directory of "BMW Service in Europe".

If you do not find satisfaction here (e.g. telephone connection or language problems), please call the Emergency Service in Munich:

National dialling code for Germany (usually 0049) 89 - 260 99 09.

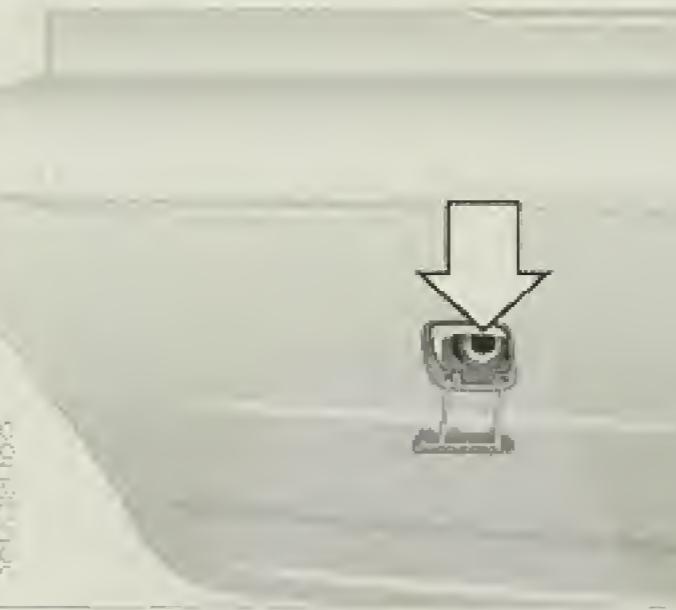
You will also find a summary of the national dialling codes at the end of the directory "BMW Service in Europe".



The screw-in towing eye is in the car's toolkit and should always be carried on the car. It can be screwed in at the front or the rear of the car, and is only to be used for towing on a firm road surface.

Access to threaded hole

Front:
Press the arrow symbol on the cover and swing it out.



Rear:
Same procedure as for front cover.

⚠ Screw the towing eye fully in until it is tight. ◀

For towing, either use a towbar or a nylon rope or tape; since the latter are resilient, they help to avoid sudden tensile loads.

Using a towbar

The towing eyes of both vehicles should be on the same side.

If it is impossible to avoid attaching the towbar at an angle, note the following:

- towbar clearance may be restricted when cornering
- the angled towbar generates lateral forces which could be critical if the road surface is slippery
- to compensate for the angled towbar, the towed and towing vehicles may have to be offset in relation to one another
- there is a risk of skidding to one side when the towing vehicle's brakes are applied.

⚠ The towed vehicle should not be heavier than the towing vehicle. ◀

Tow-starting

Cars with catalytic converter should only be tow-started if the engine is cold. It is always preferable to use jumper leads from another car or a separate battery to start the car.

- 1 Switch on the hazard warning flashers (comply with local regulations)
- 2 Turn the ignition key to position 2
- 3 Select 3rd gear
- 4 Keep the clutch pedal down. When the car is moving, gradually release the clutch pedal. After the engine has fired and is running, depress the clutch pedal again
- 5 Switch off the hazard warning flashers.

Have the cause of starting difficulties traced and rectified by BMW Service.

Automatic-transmission cars: These cars cannot be tow-started. For jump-starting, refer to right column.

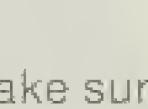
Towing away

- 1 Ignition key in setting 1 to enable brake lights, headlight flashers, horn and windscreens wipers to be activated
- 2 Switch on the hazard warning flashers (comply with local regulations).



The turn signal function has priority over the hazard warning light function. For this reason, from ignition key setting 1, you are able to operate the turn signals, even if the hazard warning lights are switched on. ▶

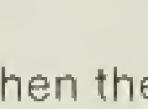
If the car's electrical system has failed, display a warning notice to the rear or place the warning triangle in the rear window.



Make sure that the ignition key is in position 1 even if the electrical system has failed, to prevent the steering lock from engaging. ▶

Automatic-transmission cars:

- 1 Move the selector lever to N.
- 2 Maximum towing speed: 70 km/h (43 mile/h).
- 3 Maximum towing distance: 150 km (app. 93 miles).



When the engine is not running, there is no power assistance. The steering and brakes will require extra effort to operate. ▶

Starting with a flat battery

Do not use the spray products sold as starting aids.

If the car's own battery is flat, the engine can be started by using two jumper cables from another vehicle's battery. Use only jumper leads with fully insulated battery-post clips, e.g. to German DIN 72551 standard.



Contact with electrically live components while the engine is running can represent a potentially fatal risk. ▶

Do not depart from the procedure described below, or else personal injury could result or one or both vehicles be damaged.

1 Check that the other vehicle's battery has a voltage of 12 V and approximately the same capacity in Amp/h (this should be printed on the battery). Pull the cap up to remove it. The picture shows the position of the jump-starting point in the BMW 735i/L and 740i/L as an example. For other models, see engine compartment from page 122 onwards

2 Do not disconnect the flat battery from the car's electrical system

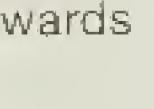
3 The bodies of the two vehicles must not touch – risk of short-circuit

Starting with a flat battery



- 4 Use one jumper lead to connect the positive terminal of the other battery to the jump-starting connection in your car's engine compartment. The cap over the jump-starting point is marked "Batt. +" (see picture). Pull the cap up to remove it. The picture shows the position of the jump-starting point in the BMW 735i/L and 740i/L as an example. For other models, see engine compartment from page 122 onwards

5 Connect the negative terminals of the two batteries as follows: first connect the jumper lead to the negative terminal on the donor battery or an earth (ground) point on the donor vehicle, then connect it to earth (ground) on the engine or body of the vehicle to be started. On your BMW a special nut is provided for this purpose on the suspension strut housing; see arrow in illustration



6 Observe the correct order as described above when using your car to jump-start other vehicles, to avoid generating sparks at the battery. ▶

- 6 If the battery in the donor vehicle is weak, allow its engine to run for a while.

Start the engine of the affected vehicle as usual, then also allow it to run for a while. If necessary, repeat the starting attempt only after a few minutes to allow the flat battery to absorb current.

- 7 Before disconnecting the jumper leads from your BMW, switch on the lights/heated rear window and maximum heater blower speed and then keep the engine running for at least 10 seconds in order to avoid voltage peaks reaching the electrical consumers from the voltage regulator.

8 Disconnect the jumper leads in the opposite order from that in which they were originally attached.

Have the battery recharged (depending on the cause of the fault).

! Only change wheels on a flat, firm, non-slip surface. If the surface is soft or slippery (snow, ice, tiles etc.), the car or the supporting jack could slip away to one side.

The car jack should likewise be resting on a firm surface.

Do not position wooden blocks etc. beneath the jack, as its maximum load capacity could otherwise be exceeded.

Never lie under the car or start the engine when it is jacked up; a very severe or fatal injury could result.

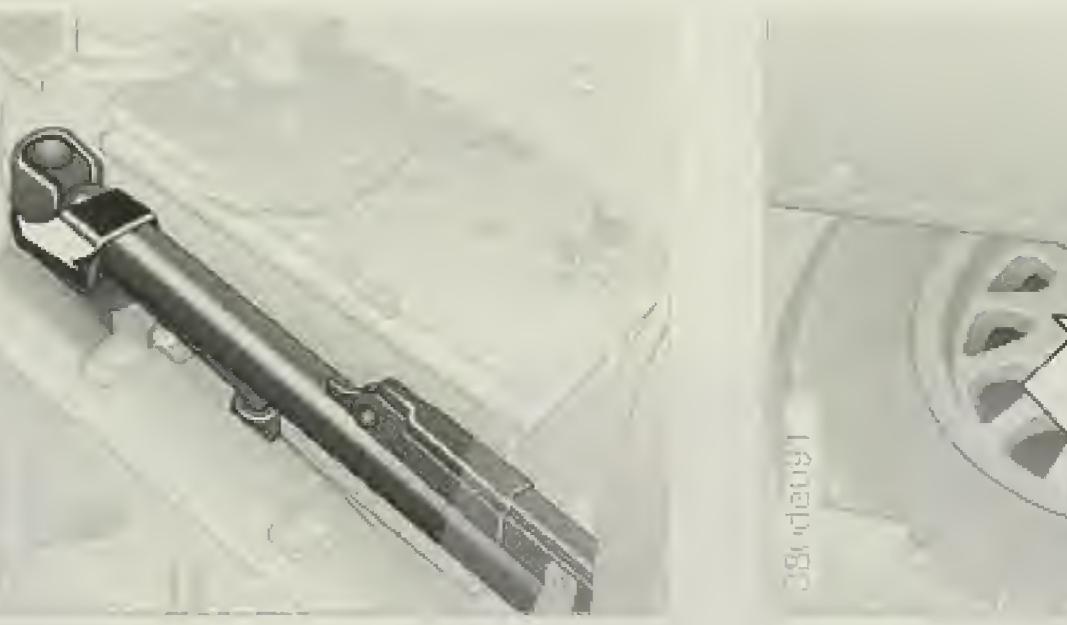
Additional safety precautions in the event of a breakdown:

Where possible, take the car off busy roads and away from moving traffic. Engage the steering lock with the wheels pointing straight ahead, engage the parking brake and engage first gear, reverse or selector lever position P.

Switch on the hazard warning flashers. Request all occupants to leave the car and to wait in a safe place (e.g. behind roadside crash barriers).

If necessary, set up the warning triangle or a flashing warning light at a sufficient distance to the rear.

Comply with national legislation in these respects. **!**

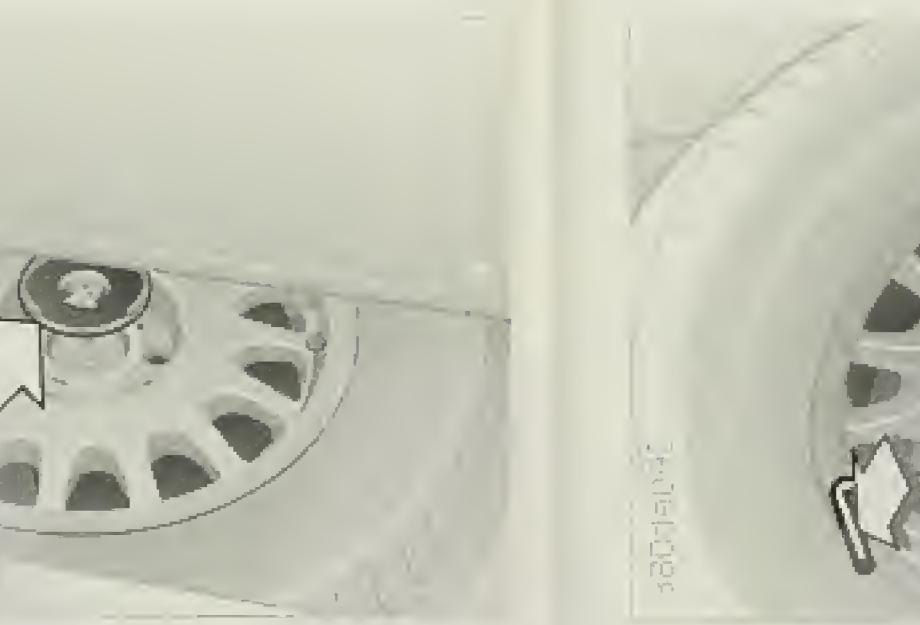


To change a wheel, you need:

Jack

Pull down the right-hand trim in the luggage compartment with the handle at the top and release the clip (arrow).

After use, lower the jack fully, insert in the holder at the rear and press down the clip.



Spare wheel and adapter* for wheel stud covers*

These are both under the mat in the luggage compartment. Take out the mat.

Take off the adapter (arrow), unscrew the wing nut by hand and remove the wheel.



On wheels without hub caps, a plastic support is fitted in place of the adapter. **!**

Wheel stud wrench, centering pin and screwdriver

In the toolkit underneath the luggage compartment lid.

Wheel-changing



12 Centre the wheel stud cover and attach. Push it on and turn the left or right until wheel cap locks into place.

! Use the car's jack only for wheel-changing. Do not attempt to raise a different type of vehicle or any other load or heavy weight with the jack, as this could lead to an accident and personal injury.

For safety reasons, the wheel studs should be checked with a calibrated torque wrench without delay to ensure that the specified tightening torque of 100 Nm (74 lb.ft.) has been reached. If a new wheel (for instance the spare wheel) is fitted for the first time, check the tightening torque again after the car has covered about 1000 km (about 600 miles). **!**

When replacing a wheel in the spare wheel well, make sure that the central threaded rod in the well is not bent or damaged.

Procedure

- 1 Fit the adapter for the wheel stud cover in position, apply the wheel stud wrench and turn to the left. For lockable wheel studs, see page 148
- 2 Slacken off the wheel studs by a $\frac{1}{2}$ turn
- 3 Turn the cap over the jacking point to the left with a screwdriver to release it
- 4 Insert the jack fully into the socket and position it so that the base is resting firmly on the road. Make quite sure that the car has been prevented from rolling away
- 5 Continue to turn the crank handle until the wheel you wish to change is lifted clear of the ground
- 6 Take out the wheel studs and remove the wheel
- 7 Remove the centering pin from the toolkit and insert, with plastic end-piece, into one of the threaded holes (arrow)
- 8 Offer up the new wheel, screw in at least two studs on opposite sides of the hub, and take out the centering pin
- 9 Insert and screw up the remaining wheel studs, then tighten them all firmly, working across the hub rather than round it
- 10 Lower the car, remove the jack and screw the jacking point cap back in with the screwdriver
- 11 Tighten the wheel studs to their final torque, again in a crosswise pattern

If your car is equipped with wheels other than Original BMW alloy wheels, make sure that the correct wheel studs are used.

Have the flat or defective tyre repaired or replaced as soon as possible, and the new tyre balanced on the wheel.

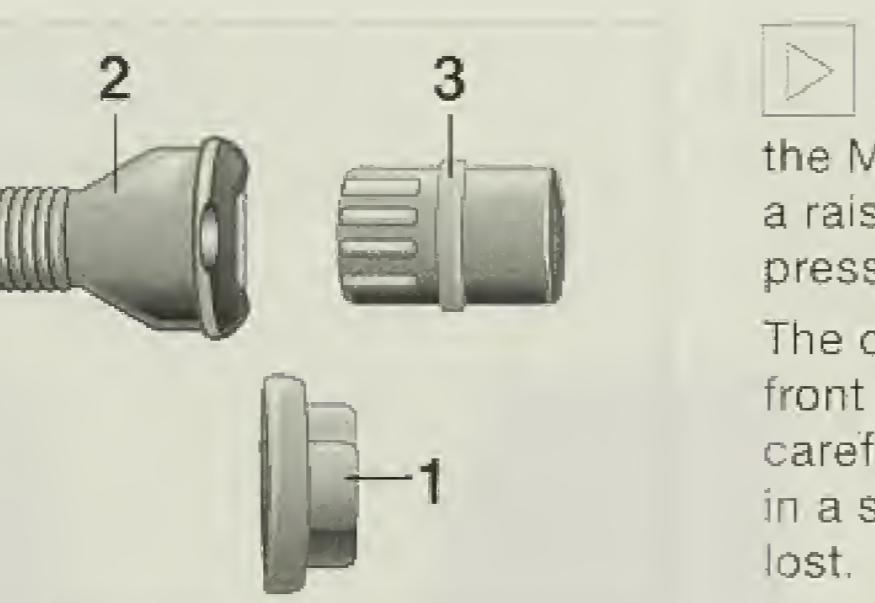
 **Tyre size 255/45 ZR 18*** on the rear axle:

In the event of a puncture, it may be necessary to fit the 235/50 ZR 18 spare wheel at the rear. Although this wheel can be used entirely satisfactorily in all load and speed ranges, a 255/45 ZR 18 tyre should be fitted again as soon as possible.◀

Cars with navigation system

If your car is equipped with a navigation system*, this must be calibrated after each wheel or tyre change, to ensure that the system continues to function correctly. If you have any queries in this connection, please contact BMW Service.

Lockable wheel studs



- 1 Stud cap (not for wheels with wheel stud cover)
- 2 Wheel stud for adapter
- 3 Adapter (supplied in toolkit)

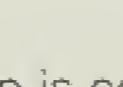
To remove:

- 1 Turn stud cap (1) slightly anti-clockwise with the wheel stud wrench and remove.
- 2 Remove adapter (3) from the car's toolkit and insert it into the wheel stud.
- 3 Unscrew the wheel stud (2).

After inserting and tightening the wheel stud again, remove the adapter and press on the stud cap.

Fuel filler flap



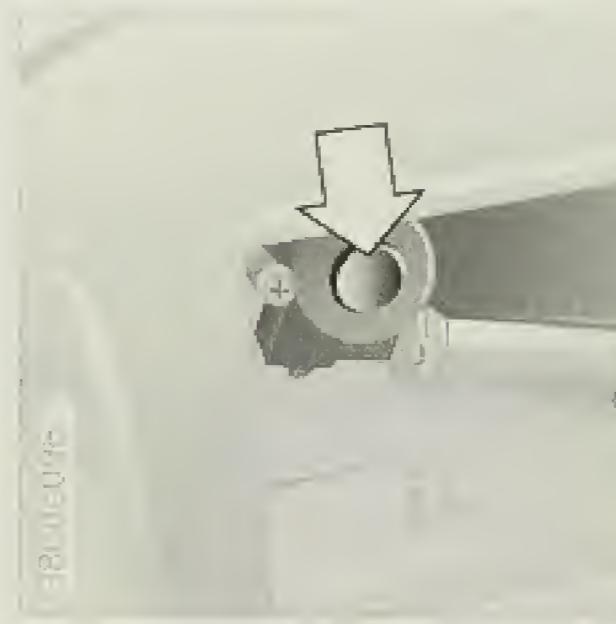
 The cap is correctly installed if the M of the BMW logo is located over a raised section of the stud when pressed on.◀

The code number is embossed on the front of the adapter. Please make a careful note of this number and keep it in a safe place, in case the adapter is lost.

Manual release

- 1 Swing the right side trim in the luggage compartment down by means of the handle at the top.
- 2 Pull the knob marked with the petrol pump symbol.

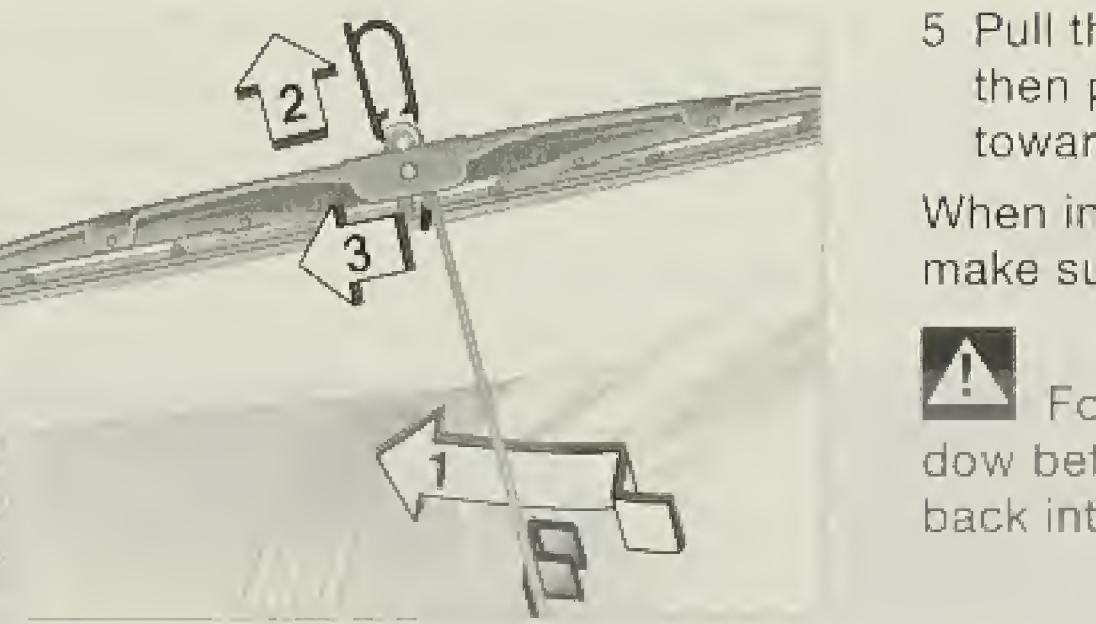
Sliding/tilt sunroof



Manual operation

- 1 Remove the interior light (refer to "Changing lamp", page 154), grip behind the aperture and press out the cover.
- 2 Remove the plug (arrow) and turn the sunroof in the desired direction with the Allen key from the car's toolkit.

Have the fault rectified by BMW Service without delay.



5 Pull the spring keeper (arrow 3), then pull off the wiper blade towards the arm.

When inserting a new wiper blade, make sure that it engages securely.

⚠ Fold the wipers against the window before turning the ignition key back into setting 1 or 2. ◀

- 1 Move the wipers to the fold-out position:
Switch on the ignition.
Move the wiper control lever to position 1 (intermittent wipe).
Switch the ignition off again when the wipers are stationary between wiping movements – they will then move to an approximately vertical position
- 2 Lift the wiper arm away from the glass and hold it securely
- 3 Press the wiper blade sideways past the blade guide and swing it up (arrow 1)
- 4 Bend up the plastic cover slightly to release it and take the cover off upwards (arrow 2)

Bulb-changing

Bulbs and lights are crucial safety features of your car. Appropriate care and attention should therefore be taken when handling these components. If you are unfamiliar with such tasks, it is better to entrust them to BMW Service.

▶ Do not touch glass bulbs on new lamps with your bare hands. Use a clean cloth, paper tissue or similar instead, or handle the bulb only by its base. ◀

A box containing spare bulbs is available from BMW Service.

⚠ For all work on the electrical system, switch off affected consumers or disconnect the negative battery terminal, otherwise short circuits can be caused.

Observe any instructions supplied by the bulb manufacturer, to avoid causing injury or damage when changing bulbs. ◀



1 Low beam headlights
2 High-beam headlights

Dipped headlights: H1, 55 Watt bulb
High-beam headlights: H7, 55 Watt bulb

⚠ Bulb H7 is under pressure, so wear goggles and gloves. If the bulbs are damaged, injury may be caused. ◀

To release the bulb cover:

– dipped headlights: squeeze the tabs (arrows) together

– high-beam headlights: introduce screwdriver (from toolkit) and press in the direction of the arrow

- 1 Remove the cover
- 2 Pull the plug off the bulb
- 3 Disengage the wire clip
- 4 Change the bulb.



3 Side and parking lights
5 Watt bulb

1 Pull out the bulb holder
2 Pull out the bulb and change it.

Xenon headlights*

The light source of this dipped headlight is a gas discharge lamp.

When switched on, a high electrical charge is passed through the pressurized gas (xenon) inside the lamp. The full lighting effect is achieved after a slight delay. Appropriate safety circuits are installed as a precaution.

The light yield, which is almost three times that of conventional headlights, illuminates the area in front of the car and along the edge of the road particularly well with the aid of the special optical system.

The lamp has an extremely long operating life. Signs of lamp ageing include flickering, a marked reddish hue and a decline in light intensity. Unnecessary switching on and off shortens the life of the lamp.

If a lamp should fail, the car can be driven cautiously with the fog lights in use, provided this is not prohibited by local regulations.

! Due to the high voltage nature of the lighting system, all work on it, including the changing of bulbs, has to be performed by trained specialists. 

**Front flashing turn indicator**

21 Watt bulb

- 1 Pull off the cover
- 2 Insert a Phillips-head screwdriver (arrow) as far as the stop and remove the screw (approx. 4 turns)
- 3 Remove the bulb forwards
- 4 Release the bulb holder and take it out
- 5 Press the bulb in slightly, turn to the left and remove
- 6 After changing the bulb, insert the lugs on the light in the cutouts on the headlight, push in and tighten the screw
- 7 Attach the protective cap.

Side turn indicator repeater*

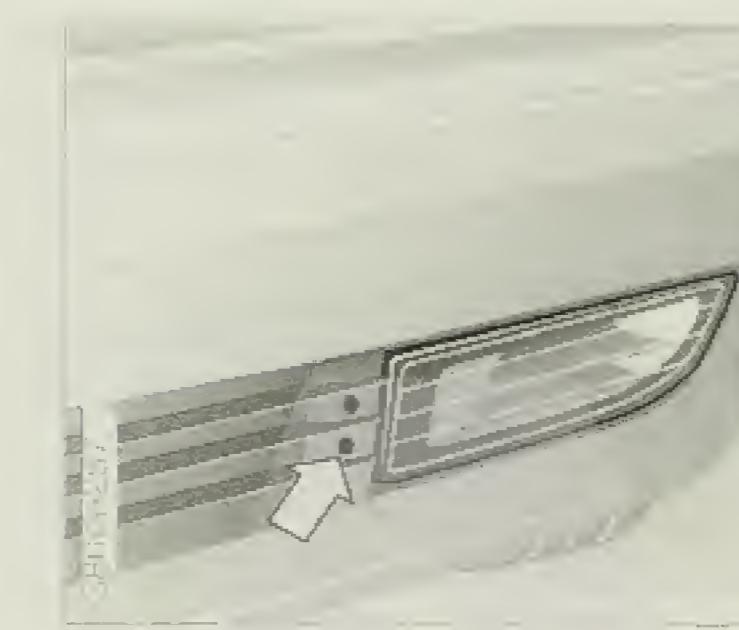
5 Watt bulb

- 1 Press out lamp by inserting a screwdriver in the rear edge
- 2 Press the bulb in slightly, turn to the left and remove.

**Fog lights**

H3, 55 Watt bulb

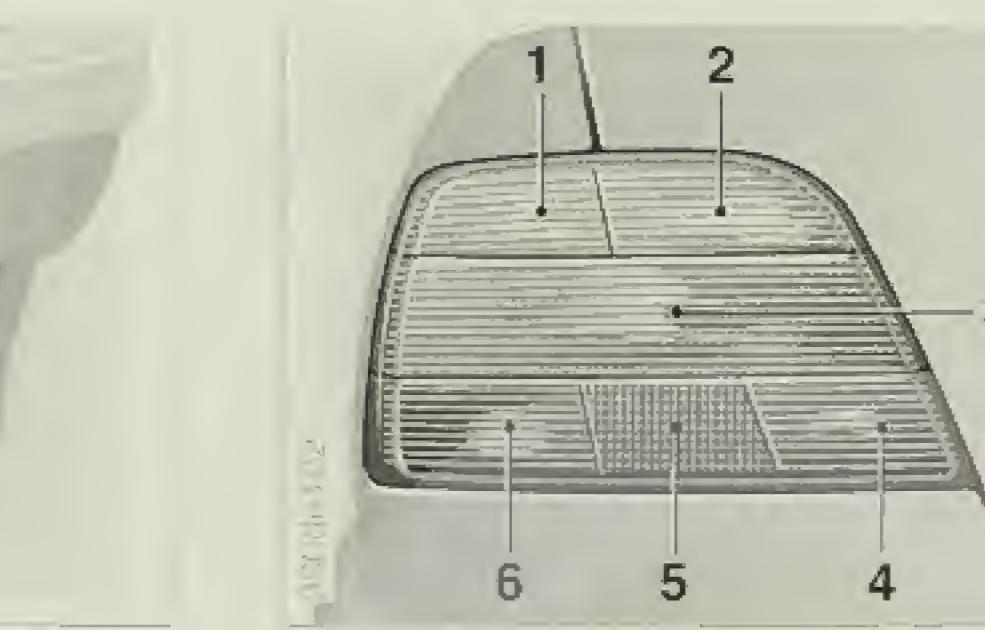
- 1 Release the fog light holder with a screwdriver (arrow)
- 2 Lift the fog light out forwards
- 3 Release the cap on the back of the fog light and remove
- 4 Pull off the plug
- 5 Disengage the wire clip
- 6 Change the bulb
- 7 Insert the fog light again and press it in firmly until it is heard to engage in position.



BMW 725tds:
H7, 55 Watt bulb

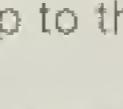
! The bulb is under pressure; so wear goggles and gloves. If the bulbs are damaged, injury may be caused.

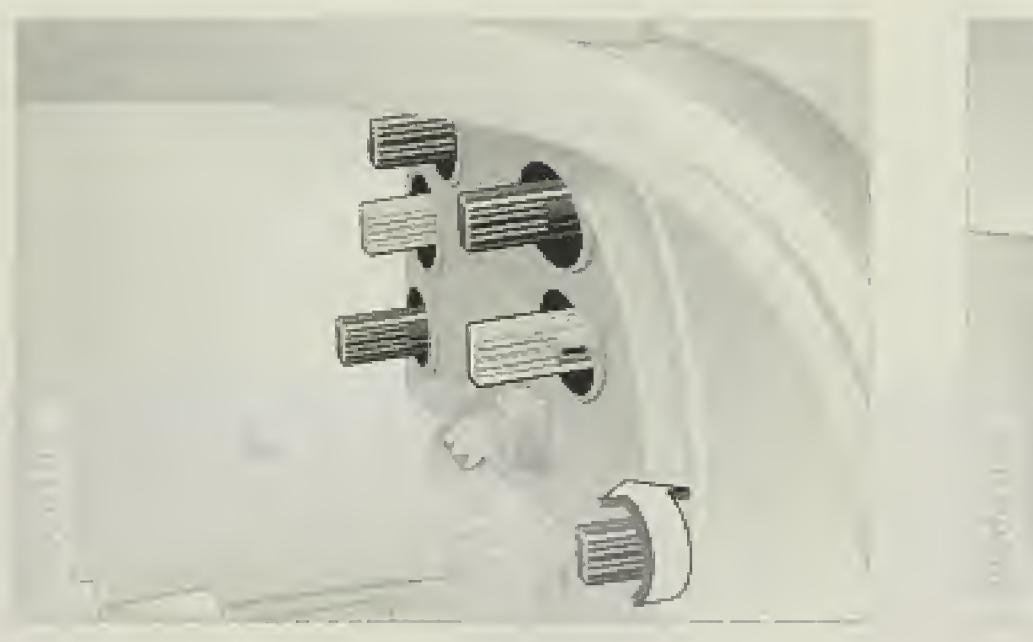
- 1 Remove the lower screw (arrow) and swing out the headlight
- 2 Release the spring on the back of the fog light and turn the cap to the left
- 3 Disconnect the wire spring clip and renew the bulb after pulling off the contact cap.

**Rear lights**

Rear lights: 5 Watt bulbs
Other lights: 21 Watt

1 Flashing turn indicators	yellow
2 Reversing lights	white
3 Rear lights	red
4 Rear fog lights	red
5 Reflectors	red
6 Brakelights	red

! If both rearlight bulbs fail, the brake light performs the function of the rear light. 

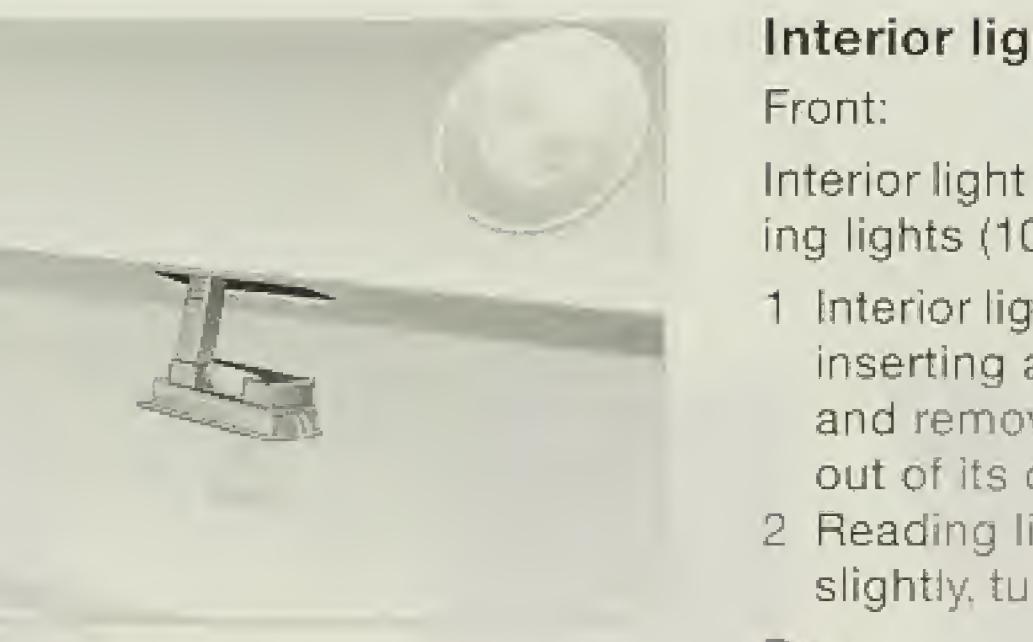


- 1 Fold down the side trim in the luggage compartment, using the handle at the top
- 2 Press the appropriate bulb holder in slightly, turn to the left and remove
- 3 Remove the bulb in the same way.

Central brake light*

21 Watt bulb

- 1 Open trunk lid
- 2 Remove the grommet from the bulb holder beneath the rear-window shelf
- 3 Press the bulb holder in slightly, turn to the left and remove
- 4 Remove the bulb in the same way.



Licence plate lights

5 Watt bulb

- 1 Press the narrow side of the light with a screwdriver to remove
- 2 Change the bulb.

Interior lights

Front:

Interior light (10 Watt bulb) with reading lights (10 Watt bulbs)

- 1 Interior light: Press out bulb by inserting a screwdriver in one side, and remove reflector. Pull the bulb out of its contact tabs
- 2 Reading light: press the bulb in slightly, turn to the left and remove.

Rear:

Interior light (10 Watt bulb) with reading light (5 Watt bulb)

- 1 Insert a screwdriver at the top and press the light out of the cutouts
- 2 Interior light: press the lug back at the reflector and change the bulb
- 3 Reading light: press the bulb in slightly, turn to the left and remove.

Indirect lighting (1 Watt bulb)

- 1 Unclip the bulb holder
- 2 Change the bulb

Bulb-changing

Footwell lights

5 Watt bulb

- 1 Lever the glass out at one side with a screwdriver
- 2 Change the bulb.

Door warning lights

5 Watt bulb

- 1 Press the light out with a screwdriver at the narrow side
- 2 Turn the light holder to the left and remove
- 3 Change the bulb.

Glove box light

5 Watt bulb

- 1 Press out light at the recess with a screwdriver
- 2 Take off the reflector
- 3 Change the bulb.

Luggage compartment lights

10 Watt bulb

Bulbs underneath the rear shelf and in the boot lid:

- 1 Press out light at the recess with a screwdriver
- 2 Take off the reflector
- 3 Change the bulb.

The winter, with its frequently changing weather conditions, not only calls for your style of driving to be modified as appropriate but also for certain measures to be taken to ensure that your car can be driven safely and reliably.

Coolant

Ensure that the mixing ratio of 50/50 water/long-term anti-freeze and corrosion inhibitor is present. This will provide protection down to a temperature of approx. -37 °C. Renew the coolant every three years.

Locks

Can be freed with BMW lock de-icer. This de-icer also contains lubricant components. Following this, we advise treatment with BMW lock cylinder grease.

Rubber parts

To prevent rubber parts on doors, engine bonnet and boot lid from freezing solid, coat them with a rubber protection agent and/or silicone spray.

 You can obtain care agents from BMW Service. ◀

Diesel fuel

To ensure that the diesel engine operates reliably throughout the cold season, the winter-grade fuel generally available at filling stations must be used. The fuel filter heating function, which is fitted as standard, prevents the fuel from gelling while the vehicle is on the move.

The use of flow improvers is not permitted, as these can lead to problems in the fuel system.

The addition of petroleum spirit can lower the pour point of diesel fuel.

Proportion of petroleum spirit:	Pour point at °C
10%	Winter diesel: app. -20
30%	Winter diesel: app. -26
50%	Winter diesel: app. -31
	Summer diesel: app. -9
	Summer diesel: app. -15
	Summer diesel: app. -25

Snow chains

BMW snow chains* may be fitted to both summer and winter tyres, but only to both rear wheels. Always observe the manufacturer's safety recommendations. Do not exceed 50 km/h (app. 30 mile/h) with snow chains fitted. To enhance traction, it is advisable to switch off ASC+T and/or DSC* whenever snow chains are fitted see page 98.

Moving away from a standstill

To move away from a standstill in deep snow or to "rock" the car free, it is best to switch off ASC+T or DSC*; see page 98.

Driving on slippery roads

Operate the accelerator pedal sensitively, avoid high engine speeds and shift up to the next higher gear early. On uphill or downhill gradients, select the next lower gear in good time. Maintain a generous distance from the vehicle in front as a safety precaution.

Brakes

Winter road conditions greatly reduce the amount of tyre grip that is available, so that the driver must expect braking distances to be considerably longer than usual in every situation. ABS prevents the wheels from locking, so that the car remains stable and can always be steered.

Should the ABS fail and the road wheels lock, reduce pressure on the brake pedal immediately so that the wheels can still turn although they are being braked. Then increase pedal pressure, reduce when the wheels start to lock, then increase again etc. This cadence-type braking action reduces braking distance and you retain steering control of your car at the same time.

You can still try to drive round danger areas once you have reduced the brake pedal pressure.



On a slippery surface, do not shift to a lower gear as a means of braking the car, or the rear wheels may lock and cause the car to skid or the driver to lose control. ABS and ASC+T or DSC* cannot counteract this form of wheel locking. ◀



When braking hard on slippery roads or surfaces, or with very different friction coefficients, you should always depress the clutch pedal. ◀

If the car skids

Depress the clutch and take your foot off the accelerator, or move the automatic transmission selector lever to N. Try to steer into the skid and bring the car under control in this way.

Parking

Select 1st gear or reverse, or move the automatic transmission selector lever to P. If parked on a slope, apply the parking brake as well. To prevent the parking brake linings from seizing to their drums as a result of frost and corrosion, dry out the parking brake by pressing the pedal down lightly until the car comes to a halt.

Towing a trailer

When a trailer is towed, the demands on both car and driver are more severe.

A trailer reduces manoeuvrability, the ability to climb hills, acceleration and braking capacity and makes the car handle and corner differently.

For the trailer weight limit and towbar downthrust (nose weight), please refer to "Technical Data", page 184. The trailer weight limit is also shown in the car's registration papers (depending on national regulations). Consult BMW Service regarding increased trailer weights.

Trailer tow hitch*

If a trailer tow hitch is fitted by the manufacturer, the vehicle will also be equipped with trailer-towing suspension* at the rear as standard. This compensates for the weight of the tow hitch and also ensures optimum road behaviour when the trailer is not being towed.

The suspension settings of your BMW afford optimum safety, ride comfort and sports performance. They are also perfectly suitable for towing a trailer at up to the standard specified weight, provided that towing is restricted to one vacation period per year or thereabouts, and the driving style is modified to allow for the more severe operating conditions.

If a trailer tow hitch* is retrofitted, the version approved by BMW with detachable ball head is recommended, and should be expertly installed by BMW Service.

Keep the detachable ball rod greased to make fitting and removal easier.

If the trailer tow hitch is retrofitted, you are recommended to install the trailer-towing suspension as well. It is also essential if the higher trailer weights that are permissible with certain types of trailer are to be towed.

On models with self-levelling suspension, the trailer-towing suspension need not be retrofitted.

BMW does not approve of any other suspension systems offered by the automotive trade for trailer towing purposes.

► When a trailer coupling is fitted, the effect of the self-regenerating rear bumper is impaired. ◀

The use of a stabilizing device can be recommended, particularly if the trailer is a heavy one. Information can be obtained from BMW Service.

Towing a trailer

Nose weight

This is the load exerted downwards by the trailer on the ball head of the tow hitch (it can be determined with the aid of bathroom scales or similar).

In Germany: a minimum nose weight of 25 kg (55 lb) is laid down by law.

The nose weight limit should if possible be fully utilized but not exceeded.

The trailer's nose weight affects the towing vehicle, and must not lead to the car's gross weight limit or rear axle load limit being exceeded if a trailer is being towed. The payload is partially reduced by the weight of the trailer coupling, or when towing a load, as a result of the nose weight.

For attaching and removing the ball head, please refer to the separate instructions.

To install the cover flap, first insert it at the top, press into place, then press up the lower section of the flap to engage.

The flap is properly in place if it does not protrude out of the rear apron at any point.

A low centre of trailer gravity makes the outfit much more stable and safe to drive.

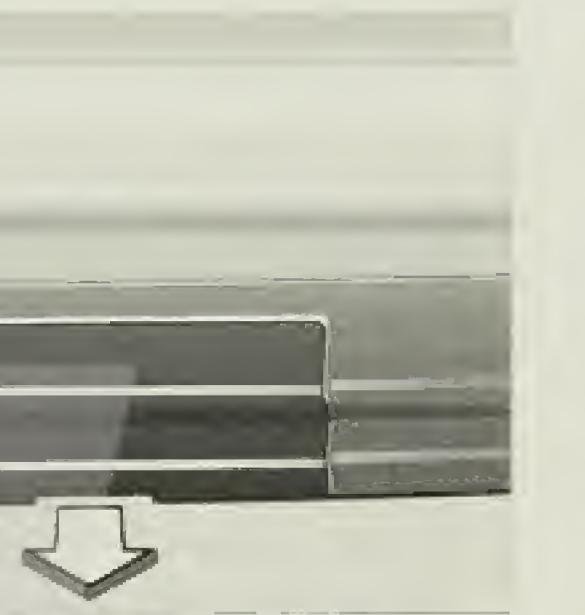
Do not exceed either the trailer's gross weight or the specified trailer load limit for the car. The smaller value is the limit which should be adhered to.

Before purchasing a trailer, it is advisable to obtain a declaration from the trailer concerning the effective trailer weight and trailer payload limit.

Gradients

In the interests of safety and to avoid obstructing other traffic, the maximum gradient (applicable at sea level) is limited to 12% (1 in 8.3). If lighter trailer weights are authorised by special permit, the limit is 8%.

As altitude above sea level increases, engine power output tends to drop. You should therefore take particular care when driving through mountainous country, since the maximum gradient on which the outfit can be started may be lower than usual.



Cover flap*

Take hold of the cover flap from underneath at the cutout, pull back downwards (arrow) and remove from the upper guide.

For attaching and removing the ball head, please refer to the separate instructions.

To install the cover flap, first insert it at the top, press into place, then press up the lower section of the flap to engage.

The flap is properly in place if it does not protrude out of the rear apron at any point.

A low centre of trailer gravity makes the outfit much more stable and safe to drive.

Downhill gradients

Special care must be taken when descending gradients: always shift down to the next-lower gear at the top of a steep hill (if necessary, right down to 1st gear or by moving selector lever to position 2) and descend the hill with great caution.

Speed limit

The maximum speed limit when towing a trailer is 80 km/h in Germany, and similar speed limits apply in other countries also. The trailer load limits have been chosen to ensure ample driving stability up to this speed. If higher speed limits apply in other countries, you are none the less recommended not to drive faster for safety reasons.

If the trailer begins to swing from side to side, the outfit can only be stabilized by braking immediately.

Tyre pressures

Check the car's and the trailer's tyre pressures most carefully. Comply with the trailer manufacturer's tyre pressure instructions.

Outside mirrors

The standard outside mirrors may prove inadequate for trailer towing work; the law lays down that the car should be equipped with two outside mirrors with which the rear corners of the trailer can be seen. Mirrors of this kind, including versions with adjustable arms, can be obtained from BMW Service.

Electrical system

 If a caravan is towed, higher current consumption must be anticipated. Switch on high-consumption items in particular for as short a period as possible in order to avoid draining the battery. ▶

 Before starting the journey, always check that the trailer's rear lights are working. ▶

Roof rack*

A special roof rack system is available as an accessory for your BMW. If it is used, please comply with the installation instructions supplied.

A loaded roof rack alters the car's road behaviour and steering response quite considerably, by moving its centre of gravity.

When loading the roof rack, ensure that the specified roof load limit, the car's gross weight limit and the axle loads are not exceeded.

Details are provided in "Technical Data", page 184.

The roof load must be uniformly distributed and should not be too large in area. Heavy items of luggage should always be placed at the bottom. Make sure if necessary that sufficient space is available for the sunroof to be raised.

Correct, secure loading of the roof rack will prevent items from shifting or falling off during the journey, and thus endangering following traffic.

Roof rack*

Drive smoothly and avoid violent acceleration, braking or cornering.

The roof load increases the car's surface area exposed to the wind, so that fuel consumption will be higher and the loads on the roof structure of the car more severe.

Rule of the road



When entering a country in which the traffic drives on the other side of the road:

- 1 Release the high-beam headlight covers and take them off (see page 151)
- 2 For driving on the left: turn the disc (arrow) downwards
- 3 For driving on the right: turn the disc upwards.

Registration abroad

Cars are always supplied to conform with the registration laws of the country in which they are intended for use. If the owner moves to another country, it is important to check beforehand that import regulations and vehicle licensing laws do not make it too difficult to import the car.

Information is obtainable in Germany by calling Tel. 089/382-0 and quoting the model, vehicle identification number and date first registered.

In other countries, please contact BMW Service or the importer.

ABS prevents the wheels from locking when the brakes are applied, and thus increases active safety. Locked wheels are dangerous, because the front wheels cannot then be steered and the rear wheels may slide sideways and cause the car to spin or slide off the road.

With ABS in action, the car achieves the shortest possible braking distances for the prevailing conditions (straight-line braking or cornering, on asphalt, ice, wet roads etc.).

ABS is capable of satisfying two fundamental requirements whenever the brakes are applied:

- secure roadholding
- secure steering and manoeuvrability on differing road surfaces (asphalt, cement, dirt, wet, snow, ice).

Driving with ABS

The system functions from about 8 km/h (approx. 5 mph). Below 3 km/h (approx. 2 mph), it again malfunctions. The wheels can therefore tend to block during the final phase of braking action but, in practice, this is not critical.

The ABS regulation cycle takes place within fractions of a second. The brake pedal pulsates to warn the driver that the ABS is active and therefore that the car is reaching the adhesion limit. In addition, a chattering noise – a consequence of the ABS regulating action – reminds you to adjust your road speed to suit the road conditions whenever the friction coefficient between tyre and road surface starts to decline.

On road surfaces with a loose surface and firm base, e.g. gravel or snow, or when driving with snow chains fitted, you may find the braking distance is longer than usual. However, the advantages of greater stability and the ability to steer while braking are still available to the driver.

Information for your safety

Even ABS is unable to overcome the laws of physics. It cannot absolve the driver from the consequences of braking too late, maintaining insufficient space from vehicles ahead, exceeding the limits of adhesion when cornering at speed or encountering a poor stretch of road where aquaplaning occurs.

Disc brakes

These continue to be your responsibility. Although ABS enhances active driving safety, this should not be regarded as an invitation to take correspondingly severe risks.

To obtain full functional capability: Do not fit different sizes of tyre (retrofit as soon as possible with winter tyres/spare wheel) and also:

! Do not make any modifications to the ABS system.
All work on the ABS should be entrusted only to skilled, authorized personnel. ▲

In the event of a fault
the ABS warning lamp lights up; refer to page 16. The brake system then operates as it does on cars without ABS. However, have the system checked by BMW Service at the earliest opportunity. Additional faults to the brake system could otherwise occur without being readily apparent.

Driving hints
In damp weather or heavy rain it is advisable to apply the brakes with light pedal pressure every few kilometres. When doing so, make sure that no other road-user is endangered. This will generate sufficient heat to dry out the discs and pads.

It is a well-known fact that the most effective braking is obtained not with locked wheels but when they are still just rotating. ABS maintains this state of affairs automatically. Should the ABS malfunction, the driver should adopt the cadence braking principle if possible (see page 157).

To avoid any risk of brake fade when descending long or steep hills, select the gear which calls for a minimum amount of braking (or shift the automatic transmission down to an equivalent speed stage).

Engine braking can be enhanced by shifting to a lower gear, if necessary as far as first gear or selector lever position 2.

! Use only BMW-approved brake pads, or else the car's General Operating Permit will be invalidated. ▲

If engine braking alone is insufficient, do not apply the brakes too long with only slight or moderate force. Instead, it is better to brake the car quite hard (providing that the road behind you is clear) so that your speed is reduced noticeably and to repeat this process at brief intervals as necessary. The cooling down phase between these brake applications should avoid overheating and maintain full braking efficiency.

! Never drive with the clutch pedal held down, the gear or selector lever in neutral or with the engine switched off, or else engine braking will be lacking in the former and brakes will assist in the latter case. Make sure that the full travel of the brake, clutch and accelerator pedals is never obstructed by the floor carpet, loose mats or other items. ▲

Information for your safety

The factory-approved radial-ply (braced tread) tyres have been chosen to match your car's performance and to ensure driving safety and the desired standard of ride comfort.

The condition of the tyres and maintenance of the specified tyre pressures not only influence tyre life but also road safety to a very considerable extent.

Incorrect pressures are often a cause of tyre problems. They also have a considerable effect on the roadholding of your BMW.

! Check tyre pressures – including the spare wheel – regularly, at least every two weeks and before each lengthy journey. Incorrect tyre pressures can adversely affect the car's roadholding and cause tyre damage, which could result in an accident. **!**

Tyre tread**Tread depth and tyre damage**

Inspect tyres frequently for damage, the presence of foreign bodies, unusual wear and sufficient tread depth. Although the law in many countries calls only for a minimum tread depth of 1.6 mm (approx. 0.06 in), you are recommended to replace tyres when the tread depth is down to 3 mm (approx. 0.12 in), or else the risk of aquaplaning on even shallow water will be increased.

We recommend fitting new tyres when the treads are 3 mm (approx. 0.12 in) deep. If a tyre remains in use after this, wear indicators 1.6 mm (approx. 0.06 in) from the main rubber surface are exposed as a sign that the legal wear limit has been reached (this has applied for instance throughout Europe since January 1, 1992). **!**

! Never continue to drive on a flat tyre. If air pressure is lost from a tyre, this seriously affects the car's handling and braking, and could cause the driver to lose control.

Avoid overloading the car, as this could cause the tyres' load capacity limit to be exceeded, so that they overheat and internal damage is

caused at a rate which cannot be detected from the outside.

This could lead to sudden pressure loss.

Unusual vibration while the car is being driven could indicate a tyre fault or some other defect on your car. The same applies to any other abnormal road behaviour, such as pulling severely to the right or left. In such cases, reduce speed immediately.

Proceed carefully to the nearest BMW Service or tyre dealer, or have the car towed there so that it can be checked or its tyres inspected.

All forms of tyre damage (which could in the worst case lead to sudden and total loss of pressure) represent a risk of serious or even fatal injury to the car's occupants and to all other road users. **!**

New tyres

To maintain the car's good road behaviour, always fit tyres of the same make and tread pattern to all wheels.



Do not fit retreaded tyres, or the car's safety may be affected. Their carcasses may differ in internal construction or have aged sufficiently to cast doubt on their durability. **!**

Cars with GPS navigation system

If your car is equipped with a navigation system*, this must be calibrated so that it operates correctly after a wheel or tyre change. If you have any queries in this connection, please contact BMW Service.

Interchanging wheels and tyres

Tread wear patterns differ at the front and rear wheels according to individual operating conditions. In the interests of safety and the best possible vehicle behaviour, you are recommended not to adopt the practice of interchanging the wheels.

If it is felt that the wheels should be interchanged for reasons of operating cost, remember to weigh up the cost of having the wheels changed against the anticipated gain in tyre operating life. BMW Service can advise you.

If you do decide to interchange the wheels, please take the following precautions:

Interchange the wheels on the same side of the car only (though the spare wheel can be included if desired).

Remember that braking efficiency and tyre grip may be adversely affected.

If tyres are interchanged in this way, the procedure should be carried out at frequent intervals (max. 5000 km/3000 miles).

Always check tyre pressures after fitting, and adjust as necessary.

Do not continue to use tyres that are more than 10 years old.

Spare tyres more than 6 years old should be reserved for genuine emergencies, e.g. if a regular tyre has become punctured. New tyres should be fitted in their place as soon as possible, and they should not longer be brought into regular service when new tyres are fitted.

A tyre's date of manufacture is shown as part of the inscription on the tyre wall:

DOT ... 237 means that the tyre was manufactured in week 23 of 1997.



If different sizes of tyre are fitted to front and rear axle (see page 168), wheel changes must not be made between axles. **!**

Wheels and tyres

Use only BMW-approved tyres.

In view of the car's maximum speed, certain makes and sizes are compulsory. Details are available from BMW Service.

Comply in addition with any relevant national regulations.

The correct choice is made easier if the meaning of the tyre markings is understood. Radial-ply tyres are marked as follows:

e.g. 235/60 R 16 100W

Nominal width in millimetres

Aspect ratio in %

Code letter for radial ply

Rim diameter in inches

Load capacity figure (not on ZR tyres)

Speed code letter (ahead of the R on ZR tyres)

The speed code letter indicates the maximum permissible speed at which the tyre is to be operated.

On summer tyres:

S = up to 180 km/h (app. 112 mile/h)

T = up to 190 km/h (app. 118 mile/h)

H = up to 210 km/h (app. 131 mile/h)

V = up to 240 km/h (app. 149 mile/h)

W = up to 270 km/h (app. 168 mile/h)

ZR = over 240 km/h (app. 149 mile/h)

On winter tyres:

Q M+S = up to 160 km/h (approx. 100 mile/h)

T M+S = up to 190 km/h (approx. 118 mile/h)

H M+S = up to 210 km/h (approx. 131 mile/h)

Marks on light alloy wheels:

8 J x 16 H 2

Rim width in inches

Shoulder pattern code letter

Symbol for well-base rim

Rim diameter in inches

Hump on 2 rim flanges

Winter tyres

Protect valve inserts from dirt by fitting valve caps. Dirt in the tyre valve can often lead to a gradual loss of air pressure.

We recommend the use of winter tyres (M&S radial-ply) for driving in wintery conditions. Although all-season tyres bearing the M&S designation exhibit better properties for driving on snow and ice than summer tyres with the speed code letters H, V, W and ZR, they are generally not quite as effective as winter tyres in such conditions. The same sizes are approved for winter tyres as for summer tyres. For exceptions, see the following pages.

If winter tyres are fitted, the same make and tread pattern should be used on all four wheels (and preferably on the spare wheel as well) in the interests of good directional stability and steering response.

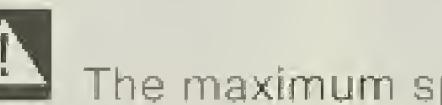
Fit only winter tyres approved by BMW. BMW Service will gladly advise you on the correct winter tyres for the conditions in which your car has to operate.

In Germany: a warning notice stating the maximum permitted speed with winter tyres fitted must be displayed in the driver's field of view if the car is capable of a higher top speed (please check for similar local legislation).

Suitable labels are available from tyre suppliers or BMW Service.

Below a tread depth of 4 mm (0.16 in), winter tyres become noticeably less suitable for winter driving conditions and should therefore be replaced for safety reasons.

Keep to the specified tyre pressures and have the wheels and tyres rebalanced each time the wheels are changed or new tyres fitted.



The maximum speed limits for the various winter tyres must always be complied with.

Lack of expert knowledge or incorrect handling of tyres can cause damage and lead to accidents.

All work on tyres should therefore be carried out only by experts. BMW Service will gladly assist you. ▲

Store wheels and tyres in a cool, dry and preferably dark place when not in use. Protect tyres against contamination from oil, grease and fuel.

Cars with GPS navigation system

If your car is equipped with a navigation system*, this must be calibrated so that it operates correctly after a wheel or tyre change. If you have any queries in this connection, please contact BMW Service.

Tyre sizes	Pressed- steel wheel	Alloy wheel	Offset, mm (in)
BMW 725tds, 728i/L			
215/65 R 16 98 V	7J x 16	7.5J x 16	20 (0.79)
235/60 R 16 100 W	-	7.5J x 16	20 (0.79)
	-	8J x 16	23 (0.91)
245/55 R 16 100 W	-	8J x 16	23 (0.91)
235/50 ZR 18	-	8J x 18	20 (0.79)
Front: 235/50 ZR 18	-	8J x 18	20 (0.79)
Rear: 255/45 ZR 18	-	9J x 18	22 (0.87)
Front: 235/50 ZR 18	-	8J x 18	13 (0.51)
Rear: 255/45 ZR 18	-	9.5J x 18	25 (0.98)
215/65 R 16 98 Q/T/H M+S	7J x 16	7.5J x 16	20 (0.79)
235/60 R 16 100 Q/T/H M+S	-	7.5J x 16	20 (0.79)
	-	8J x 16	23 (0.91)
245/55 R 16 100 Q/T/H M+S	-	8J x 16	23 (0.91)
235/50 R 18 98 Q/T/H M+S	-	8J x 18	20 (0.79)

Note the tyre and wheel data in the car's official documents. If sizes not approved by the manufacturer are fitted, an entry in the car's documents may be necessary. Comply with local legislation.

There are no winter tyres for size 235/50 ZR 18 at the front and 255/45 ZR 18 at the rear.

Nor can snow chains be fitted.

Tyre size	Pressed- steel wheel	Alloy wheel	Offset, mm (in)
BMW 735i/L, 740i/L, 750i/L			
235/60 R 16 100 W	-	7.5J x 16	20 (0.79)
	-	8J x 16	23 (0.91)
245/55 R 16 100 W	-	8J x 16	23 (0.91)
235/50 ZR 18	-	8J x 18	20 (0.79)
Front: 235/50 ZR 18	-	8J x 18	20 (0.79)
Rear: 255/45 ZR 18	-	9J x 18	22 (0.87)
Front: 235/50 ZR 18	-	8J x 18	13 (0.51)
Rear: 255/45 ZR 18	-	9.5J x 18	25 (0.98)
215/65 R 16 98 Q/T/H M+S	-	7.5J x 16	20 (0.79)
235/60 R 16 100 Q/T/H M+S	-	7.5J x 16	20 (0.79)
	-	8J x 16	23 (0.91)
245/55 R 16 100 Q/T/H M+S	-	8J x 16	23 (0.91)
235/50 R 18 98 Q/T/H M+S	-	8J x 18	20 (0.79)

Note the tyre and wheel data in the car's official documents. If sizes not approved by the manufacturer are fitted, an entry in the car's documents may be necessary. Comply with local legislation.

There are no winter tyres for size 235/50 ZR 18 at the front and 255/45 ZR 18 at the rear.

Nor can snow chains be fitted.

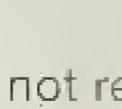
Fine-link BMW snow chains* can be fitted to summer or winter tyres, but only to both rear wheels. Always observe the manufacturer's safety recommendations when fitting.

Technical modifications

BMW Service can provide you with information as to the practical value of an intended modification and whether it is legally permissible and approved by the manufacturer. Enquiries should be accompanied by the vehicle identification number and, if relevant, the engine number.

Light-emitting diodes (LED)

Controls, displays and other equipment items inside your car have light-emitting diodes behind a cover as their light source. These LEDs resemble conventional lasers and are classified by law as "Class 1 light-emitting diodes".



Do not remove the cover and do not look straight into the unfiltered light beam for several hours in succession or you may irritate the iris of your eyes. ◀

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The BMW maintenance system has been designed to ensure that minimum cost and effort are involved in ensuring that your car remains safe and reliable at all times.

Please remember that regular maintenance is not only essential for your car's safety, but also enhances its resale value.

Service Interval indicator

Advanced technologies have been adopted as a means of computing maintenance requirements, which are then shown on the Service Interval indicator. Whereas conventional systems base the maintenance intervals only on the distances covered, the BMW maintenance system also takes into account the car's operating conditions, since one kilometre is not the same as another:

100,000 km (approx. 60,000 miles) completed exclusively in the form of short journeys cannot be equated with 100,000 km (approx. 60,000 miles) made up of long main-road journeys only.

The maintenance routines based on actual use of the car consist of the Oil Service and Inspections I and II.

The principle of determining maintenance intervals according to load effectively covers all the operating conditions to which the car is likely to be exposed. However, drivers who cover only very low annual distances – well below 10,000 km (approx. 6,250 miles) a year – should have an annual engine oil change carried out, since the engine oil ages regardless of the loads incurred.

Care of the car

Service Booklet

For further information on maintenance points and the scope of maintenance work, please refer to the car's Service Booklet.

Depending on the circumstances in which the car is used, it may be worthwhile to inspect it for damage caused by stones flung up from the road, in order to guard against subsequent corrosion.

Please make sure that the maintenance work is confirmed in the car's Service Booklet. These entries are evidence that your car has been serviced regularly and correctly, and are also the basis of any warranty claims.

► Arrange for all maintenance and repair work to be carried out by BMW Service. BMW Service is in possession of the latest information on maintenance work and repair procedures, and equipped with the special tools needed for your car. In addition, a check on parts subject to wear forms part of the maintenance procedure. ◀

Cars with a rain sensor: clean the windscreen regularly. Wax from car washes and also insects adhering to the glass could prevent the rain sensor from operating correctly.

Car wash

Your new BMW can be put through an automatic car wash, or be washed by hand, immediately.

However, to avoid blotches on the paintwork, do not wash the car when the engine compartment lid is still warm, after it has been standing in the sun or in direct sunlight.

If an automatic car wash is used, make sure that

add-on body elements such as spoilers cannot be damaged. If in doubt, consult the car wash operator first

the brush pressure is as low as possible, and the car wash operates with ample rinsing water.

Before washing the car, soak dead insects and obstinate dirt marks and wash them off.

Cars with a rain sensor: clean the windscreen regularly. Wax from car washes and also insects adhering to the glass could prevent the rain sensor from operating correctly.

► After washing the car, the brakes may not operate at full efficiency if they are still damp. Dry the brake discs by applying them briefly as soon as the car is driven. ◀



Switch off rain sensor in car washes to prevent accidental damage to your wiper blades. ◀

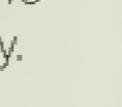


When using a steam jet or high-pressure cleaning equipment, keep the specified distance away from the car's body.

If the distance is too low or the pressure too high, damage could be caused or the surfaces caused to deteriorate so that damage occurs more easily later. In addition, water could penetrate various components on the car and cause long-term damage or failure. ◀

Clean the areas not reached in the automatic wash by hand, for example door sills, folds in door and lid panels etc.

During the winter months in particular, wash the car more frequently. Severe dirt deposits and road salt are difficult to remove and tend to damage the paintwork if not attended to promptly.



After washing the car, the brakes may not operate at full efficiency if they are still damp. Dry the brake discs by applying them briefly as soon as the car is driven. ◀

Paintwork

The car's paintwork is built up in several layers, for protection against corrosion. In addition to a protective top coating with primer, the body cavities are specially protected with materials that have been subjected to stringent and successful testing for a number of years.

The entire underfloor is coated with a resilient PVC material, then completely undersealed with a wax-based product.

Always remember that regular care of your car will go a long way towards maintaining not only its safe condition but also its resale value.

Increasing awareness of the damage which unfavourable environmental conditions can cause to paintwork have led to paint suppliers and automobile manufacturers steadily increasing the durability of the paint finishes. None the less, regional environmental factors could have adverse effects on the car's paintwork. Please wash and clean the car as frequently as needed.

In the case of mechanical loads caused by sand, road salt, stone chippings or similar, the paint surface may be broken and corrosion may then be able to develop under the paint, and spread out from the damaged areas.

Mud and dirt from the roads, tar stains, dead insects, bird droppings (strongly alkaline) but also resin and pollen from trees all contain substances that can damage the paintwork if not removed promptly (by causing patches, blisters, caustic burns or flaking off of the top coat).

In industrial areas, airborne fly ash, lime, oily soot, acid rain or sulphur dioxide as well as other impurities in the air are bound to attack the paintwork if not cleaned with sufficient regularity, though in most cases only the horizontal panel surfaces are affected.

In coastal regions the high salt content and humidity of the air encourages more rapid corrosion.

In tropical regions, more powerful ultra-violet rays and high atmospheric humidity are encountered, and temperatures may rise beyond 40 °C in the shade. In such conditions, light-coloured paint finishes may heat up to 80 °C and darker ones to as much as 120 °C.

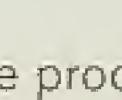
Care of paintwork

Washing the car once a week will prevent harmful substances from causing long-term damage to the paint finish, particularly if the car is parked or

driven in regions where atmospheric pollution levels are high or natural impurities occur in the air (sap from trees, pollen).

Always remove particularly aggressive substances from the paintwork immediately, or else the composition of the paint may be affected and discolouration may occur. Such substances include spilled fuel, oil, grease, brake fluid or bird droppings.

Contamination of the paint surface is particularly easy to identify after the car has been washed. Remove it as soon as possible with cleaning-grade petroleum spirit or alcohol applied to a clean cloth or wadding. Remove tar stains with a suitable tar remover, but do not apply this product to lenses and headlights. Finally, apply a paint preserving product to the treated areas.

 Cleaning and care products are available from BMW Service.◀

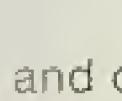
Care of the car

Protecting the paintwork

Polish the paintwork only with products containing Carnauba or synthetic waxes.

A sure sign that the paintwork needs protective treatment is when water no longer forms large droplets and rolls off the surface.

Remove care product residues and silicone from the windscreen with glass cleaner.

 Cleaning and care products are available from BMW Service.◀

Touching up paint damage

Minor paint damage can be touched in with a BMW paint spray can or a BMW paint pencil.

Your car's paint finish is stated on the type plate (see page 121), and also on the first page of the Service Booklet.

Scratches and damage caused by flying stones must be repaired immediately, to prevent rust from forming.

If any areas of the body have already started to rust as a result of paint damage, remove the rust and clean them. Apply primer coating with a BMW primer stick, allow to dry thoroughly, then apply the top coat. After a few days, polish and protect the touched-in areas.

Have more extensive damaged areas resprayed by BMW Service, using Original BMW paints and other materials in accordance with the manufacturer's directives.

Care of special parts

Alloy wheels should be treated with a suitable cleaner, particularly in the winter months, but do not use aggressive, acid, strongly alkaline or abrasive cleaning agents or steam jets at more than 60 °C (comply with the manufacturer's instructions for use).

If your car has chrome-plated parts* such as window frames, door handles etc., carefully clean these parts with enough water and shampoo additive when required, particularly if they have been subjected to contact with gritting salt. For additional treatment, use chrome polish.

Keep the inside surfaces of windows, and the mirrors, clean and free from smears with a glass cleaner. Never use cleaning agents or polishing pastes containing quartz powder on the mirrors.

 Fortified windows,* please note:

The inside of the car's side windows have a plastic layer applied to them. For this reason, do not attach any adhesive labels (unless they are intended to remain in position permanently).

► Clean only with water, to which a commercially available dishwasher detergent can be added if desired. Do not use any abrasive cleaning agents.

► Fogged-over or iced-up windows can be treated inside the car with a demisting cloth or de-icing spray – do not use an ice scraper. ◀

Clean plastic parts, artificial leather surfaces, roof lining, lamp glasses, glass cover on instrument cluster and matt black spray-painted parts with water and a plastics cleaning agent when required. Do not allow the roof lining to become wet right through. Never use solvents such as nitro thinners, cold cleanser, fuel or similar.

Apart from water, treat rubber parts only with rubber care products or silicone spray.

Clean the wiper blades with soapy water. Renew the windscreen wipers twice a year, before and after the cold season. This is particularly important on cars with a rain sensor.

Seat belts should only be cleaned with mild soap suds (without removing them from the car). Do not dry-clean or use chemical products, or the fabric may be weakened.

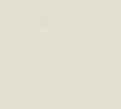
Never allow automatic seat belts to retract unless they are dry. Dirt on the seat belts can interfere with the action of the reel and represent a safety hazard.

Floor carpets and mats* can be treated with a car interior cleaner if very dirty. The floor mats can be taken out of the car to enable the interior to be cleaned more thoroughly.

Real wood trims and wooden parts should only be cleaned using a damp cloth. Then rub dry with a second soft cloth.

 Cleaning and care products are available from BMW Service. ◀

Cover the seats if exposed to hot summer sun for lengthy periods; so that the upholstery does not fade.

 Cleaning and care products are available from BMW Service. ◀

Care of upholstery materials

The pressure areas which occur when cloth seats are in regular daily use can be restored by brushing against the pile direction with a slightly moistened brush.

The tendency of the pile to lie in a particular direction on velour upholstery is not a quality defect and, just as on home textiles or clothing, cannot be avoided.

An antistatic product can be used to disperse a large proportion of this static electrical charge.

Remove fluff from cloth upholstery and rubbed-in threads or scraps of cloth or suede with a suitable fluff roller or burr brush. For particularly obstinate fluff, a cleaning glove can be obtained. Stains and fairly large areas of dirt should be cleaned off without delay, using lukewarm water and an interior cleaner, stain remover or cleaning-grade benzene. Brush the fabric afterwards to restore its appearance.

Cover the seats if exposed to hot summer sun for lengthy periods; so that the upholstery does not fade.

Care of leather

The leather* used by BMW is a natural product of the highest quality, processed by the very latest methods, and will remain in good condition for many years if correctly treated.

Since this is an authentic natural product, its special characteristics and how it is used and looked after must be given due consideration.

Regular cleaning and care are needed, since dust and dirt, for instance from the roads, collect in pores and creases, cause severe abrasion and can lead to the leather surface becoming prematurely brittle. You are therefore recommended to remove dust from the leather at regular intervals with a cloth or vacuum cleaner.

For cleaning, please use BMW leather cleaning foam.

Since dirt and grease may gradually destroy the leather's protective surface, a BMW leather care product should be applied after cleaning. It also has an antistatic effect.

To protect it against moisture and damp, the leather can be treated with BMW impregnating agent.

This treatment is recommended every six months, assuming normal use of the car.

If any liquid is spilled, wipe them off immediately. Carefully dab off grease and oil marks without rubbing, using a stain remover.

If exposed to strong sunlight when the car is parked for a lengthy period, leather seats should be covered or the windows blanketed off to prevent fading.

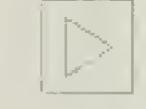
Water-buffalo leather*

Water-buffalo leather is left largely in its natural condition and may therefore exhibit slight differences in colour. Insect bites and creases caused by the animal's natural growth, together with a degree of "patina" in use are quite normal, typical characteristics of this material.

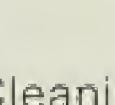
New water buffalo leather can cause slight discolouration on light coloured clothing when exposed to dampness.

For cleaning and care, please proceed as described in "Leather care".

Always remove water droplets immediately, avoiding severe dampening from wet clothing, or when cleaning.



Cleaning and care products are available from BMW Service.◀

Laying up out of use

Cleaning agents may contain hazardous substances or constitute a health risk. Always comply with the warning and hazard avoidance instructions on the pack.

When leaning the interior of the car, leave the doors or windows open. Never use any solvents or other substances not specifically intended for cleaning the car.◀

Ask your BMW Service point for advice on the work needed if you plan to lay the car up out of use for more than three months.

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Data

		BMW 728i/L	BMW 735i/L	BMW 740i/L	BMW 750i/L	BMW 725tds
Displacement	cm ³	2793	3498	4398	5379	2497
Number of cylinders		6	8	8	12	6
Max. power output	kW	142	173	210	240	105
	bhp	193	235	286	326	143
- at engine speed	1/min	5300	5700	5700	5000	4600
Max. torque	Nm	280	320	420	490	280
- at engine speed	1/min	3950	3300	3900	3900	2200
Compression ratio	e	10.2	10.0	10.0	10.0	22.0
Bore/stroke	mm	84/84	78.9/84	82.7/92	79/85	82.8/80
Mixture preparation		Digital Motor Electronics		Digital Diesel Electronics (DDE)		

Fuel consumption, carbon dioxide/CO₂ emission level

		BMW 728i/L	BMW 735i/L	BMW 740i/L
	5-speed gearbox	Automatic transmission	5-speed gearbox	Automatic transmission
Town	litres/100 km (Imp. mile/gal)	14.5 (19.5)	16.0 (17.7)	18.0 (15.3)
Country	litres/100 km (Imp. mile/gal)	7.8 (36.2)	8.3 (34.0)	8.9 (31.7)
Overall	litres/100 km (Imp. mile/gal)	10.3 (27.4)	11.1 (25.5)	12.3 (23.0)
CO ₂ emissions	grammes/km	244	264	292
		BMW 750i/L	BMW 725tds	
	Automatic transmission	5-speed gearbox	Automatic transmission	
Town	litres/100 km (Imp. mile/gal)	21.2 (13.3)	11.0 (25.7)	12.5 (22.6)
Country	litres/100 km (Imp. mile/gal)	10.2 (27.7)	6.2 (45.6)	6.9 (40.9)
Overall	litres/100 km (Imp. mile/gal)	14.2 (19.9)	7.9 (35.8)	8.9 (31.7)
CO ₂ emissions	grammes/km	338	210	236

Fuel consumption is determined according to a standard test method (93/116/EU). It is not the same as the average fuel consumption in practice, which depends on a great many different factors such as driving style, load, road condition, traffic density and flow, weather, tyre pressures etc.

Engine power output and road performance data are measured in the conditions laid down by 80/1269/EU and DIN 70200 (with the car to standard specification). This standard specifies the permitted tolerances. Additional equipment on the car may have quite a significant influence on both performance and fuel consumption, since it usually affects the car's weight and c_x value (drag coefficient), for instance roof rack, wider tyres, additional mirrors etc.

		BMW 728i	BMW 728iL	BMW 735i	BMW 735iL	BMW 740i	BMW 740iL
Length	mm (in)	4984 (196.2)	5124 (201.7)	4984 (196.2)	5124 (201.7)	4984 (196.2)	5124 (201.7)
Width	mm (in)	1862 (73.3)	1862 (73.3)	1862 (73.3)	1862 (73.3)	1862 (73.3)	1862 (73.3)
Height (unladen)	mm (in)	1435 (56.5)	1425 (56.1)	1435 (56.5)	1425 (56.1)	1435 (56.5)	1425 (56.1)
Wheelbase	mm (in)	2930 (115.4)	3070 (120.9)	2930 (115.4)	3070 (120.9)	2930 (115.4)	3070 (120.9)
Front track	mm (in)	1552 (61.1)	1552 (61.1)	1552 (61.1)	1552 (61.1)	1552 (61.1)	1552 (61.1)
Rear track	mm (in)	1568 (61.7)	1568 (61.7)	1568 (61.7)	1568 (61.7)	1568 (61.7)	1568 (61.7)
Min. turning circle Ø	m (ft)	11.6 (38.1)	12.2 (40.0)	11.6 (38.1)	12.2 (40.0)	11.6 (38.1)	12.2 (40.0)

		BMW 750i	BMW 750iL	BMW 725d s
Length	mm (in)	4984 (196.2)	5124 (201.7)	4984 (196.2)
Width	mm (in)	1862 (73.3)	1862 (73.3)	1862 (73.3)
Height (unladen)	mm (in)	1425 (56.1)	1425 (56.1)	1435 (56.5)
Wheelbase	mm (in)	2930 (115.4)	3070 (120.9)	2930 (115.4)
Front track	mm (in)	1552 (61.1)	1552 (61.1)	1552 (61.1)
Rear track	mm (in)	1568 (61.7)	1568 (61.7)	1568 (61.7)
Min. turning circle Ø	m (ft)	11.6 (38.1)	12.2 (40.0)	11.6 (38.1)

		BMW 728i	BMW 728iL	BMW 735i	BMW 735iL	BMW 740i
Vehicle unladen (incl. one person, ready to drive, full tank, no special equipment)	kg (lb)	1785 (3935)	–	1840 (4056)	–	1895 (4178)
with automatic transmission	kg (lb)	1805 (3979)	1840 (4056)	1885 (4156)	1920 (4233)	1925 (4244)
Gross weight limit	kg (lb)	2245 (4949)	–	2300 (5071)	–	2355 (5192)
with automatic transmission	kg (lb)	2265 (4993)	2300 (5071)	2345 (5170)	2380 (5247)	2385 (5258)
Gross weight limit for trailer towing	kg (lb)	2280 (5026)	–	2390 (5269)	–	2445 (5390)
with automatic transmission	kg (lb)	2300 (5071)	2335 (5148)	2435 (5368)	2470 (5445)	2475 (5456)
Front axle load limit	kg (lb)	1070 (2359)	1090 (2403)	1135 (2502)	1160 (2557)	1145 (2524)
Rear axle load limit	kg (lb)	1250 (2756)	1265 (2789)	1270 (2800)	1280 (2822)	1295 (2855)
Rear axle load limit for trailer towing	kg (lb)	1350 (2976)	1365 (3009)	1410 (3180)	1420 (3131)	1435 (3164)
Trailer loads in acc. with EC operating permit (in acc. with factory specification and legally authorised in Germany). BMW Service can supply information on permissible increases. Note and comply with different values in certain countries.						
- unbraked	kg (lb)	750 (1653)	750 (1653)	750 (1653)	750 (1653)	750 (1653)
- braked, max. gradient 12% (1 in 8.3)	kg (lb)	1900 (4189)	–	1900 (4189)	–	2100 (4630)
- with automatic transmission	kg (lb)	1900 (4289)	1900 (4189)	2000 (4409)	2000 (4409)	2100 (4630)
- braked, max. gradient 8% (1 in 12.5)	kg (lb)	2100 (4630)	2100 (4630)	2100 (4630)	2100 (4630)	2100 (4630)
Trailer nose weight	kg (lb)	90 (198)	90 (198)	90 (198)	90 (198)	90 (198)
Permissible gross weight of car with trailer (12% gradient)	kg (lb)	4180 (9215)	–	4290 (9458)	–	4545 (10020)
- with automatic transmission	kg (lb)	4200 (9259)	4235 (9336)	4435 (9777)	4470 (9855)	4575 (10086)
Roof load	kg (lb)	100 (220)	100 (220)	100 (220)	100 (220)	100 (220)
Do not exceed either the axle load limits or the car's gross weight limit.						
Load-area capacity acc. to VDA test	l (cu.ft)	500 (17.65)	500 (17.65)	500 (17.65)	500 (17.65)	500 (17.65)

		BMW 740iL	BMW 750i	BMW 750iL	BMW 750tds
Unladen vehicle weight (incl. driver, ready for driving, full tank, no special equipment)	kg (lb)	–	–	–	1804 (402)
with automatic transmission	kg (lb)	1965 (4332)	2055 (4530)	2104 (462)	1804 (405)
Gross weight limit	kg (lb)	–	–	–	2280 (5026)
with automatic transmission	kg (lb)	2425 (5346)	2515 (5545)	2570 (5666)	2300 (5071)
Gross weight limit for trailer towing	kg (lb)	–	–	–	2355 (5104)
with automatic transmission	kg (lb)	2515 (5545)	2605 (5743)	2660 (5864)	2355 (5148)
Front axle load limit	kg (lb)	1165 (2568)	1200 (2646)	1210 (2668)	1104 (2447)
Rear axle load limit	kg (lb)	1315 (2899)	1355 (2987)	1390 (3064)	1245 (2745)
Rear axle load limit for trailer towing	kg (lb)	1455 (3208)	1495 (3296)	1530 (3373)	1345 (2965)
Trailer loads according to EC operating permit (in acc. with factory specification and legally authorised in Germany). BMW Service can supply information on permissible increases. Note and comply with different values in certain countries.					
- unbraked	kg (lb)	750 (1653)	750 (1653)	750 (1653)	750 (1653)
- braked, max. gradient 12% (1 in 8.3)	kg (lb)	1900 (4189)	–	2100 (4630)	1900 (4118)
- with automatic transmission	kg (lb)	1900 (4289)	2100 (4630)	2100 (4630)	2100 (4630)
- braked, max. gradient 8% (1 in 12.5)	kg (lb)	2100 (4630)	2100 (4630)	2100 (4630)	2100 (4630)
Permitted Nose weight	kg (lb)	90 (198)	90 (198)	90 (198)	90 (198)
Permissible gross weight limit of car and trailer (at 12%)	kg (lb)	–	–	–	4215
- with automatic transmission	kg (lb)	4615 (10174)	4705	4780	4435
Permitted roof load Roof load	kg (lb)	100 (220)	100 (220)	100 (220)	100 (220)
Do not exceed either the axle load limits or the car's gross weight limit.					
Load-area capacity acc. to VDA test	l (cu.ft)	500 (17.65)	500 (17.65)	500 (17.65)	500 (17.65)

		BMW 728i/L	BMW 735i/L	BMW 740i/L	BMW 750i/L	BMW 725tds
Top speed	km/h mph	227 141	244 152	250 155 (governed)	-	206 128
- with automatic transmission	km/h mph	225 140	240 149	250 155 (governed)	250 155 (governed)	202 126
Acceleration from						
0 - 50 km/h	s	2.8 (3.5)	2.5 (3.4)	2.5 (2.8)	(2.7)	3.6 (3.7)
0 - 31 mph						
0 - 80 km/h	s	6.0 (6.9)	5.3 (6.1)	4.8 (5.0)	(4.8)	7.7 (8.0)
0 - 50 mph						
0 - 100 km/h	s	8.6 (9.6)	7.6 (8.4)	6.6 (7.0)	(6.6)	11.5 (12.2)
0 - 62 mph						
0 - 120 km/h	s	12.3 (13.2)	10.4 (11.5)	9.1 (9.4)	(8.8)	16.0 (17.0)
0 - 75 mph						
80 - 120 km/h						
50 - 75 mph in 4th gear	s	9.3	8.2	7.1	-	10.7
Standing-start kilometre	s	29.7 (30.5)	27.9 (29.1)	26.5 (27.1)	(26.6)	32.7 (33.4)

Values in (): - with automatic transmission

Filling capacities

	Litres (Imp. units)	Note
Fuel tank	app. 85 (18.7 gal)	- without self-levelling suspension, BMW 728i/L, 725tds
- including reserve of	app. 95 (20.9 gal)	- with self-levelling suspension
	app. 8 (1.8 gal)	- BMW 728i/L, 725tds
	app. 10 (2.2 gal)	- BMW 735i/L, 740i/L
	app. 12 (2.6 gal)	- BMW 750i/L
Windscreen washer	app. 4.5 (7.9 pints)	For further details, page 136
Including headlight cleaning system	app. 6.0 (10.6 pints)	
Intensive cleaning system	app. 1.0 (1.8 pints)	
Cooling system, incl. heater circuit	9.8 (17.2 pints)	- BMW 725tds
	11.2 (19.7 pints)	- BMW 728i/L
	12.5 (22.0 pints)	- BMW 735i/L, 740i/L
	13.0 (22.9 pints)	- BMW 750i/L
Engine oil with filter renewal	5.8 (10.2 pints)	- BMW 728i/L
	7.0 (12.3 pints)	- BMW 725tds
	7.5 (13.2 pints)	- BMW 735i/L, 740i/L
	8.0 (14.1 pints)	- BMW 750i/L
Manual gearbox, automatic transmission and final drive		Permanently filled, no oil changes

Battery

BMW 728i/L	12 V, 80 Amp/h
BMW 735i/L, 740i/L, 750i/L	12 V, 90 Amp/h
or (depending on equipment options)	12 V, 110 Amp/h
BMW 725tds	12 V, 110 Amp/h

Spark plugs

BMW 728i/L, 735i/L, 740i/L	Water pump, alternator and power steering
Double-earth electrode:	Ribbed 7 K x 1605
Bosch F7 LDCR	Air conditioning compressor
or	Ribbed 5 K x 980
NGK BKR 6 EK	
BMW 750i/L	Alternator, power steering
Single-earth electrode:	Ribbed 7 K x 1035
Bosch F9 LCR	Coolant pump, compressor for air conditioning

V-belts**BMW 728i/L**

Water pump, alternator and power steering
Ribbed 6 K x 1555
Air conditioning compressor
Ribbed 5 PK x 890

BMW 735i/L, 740i/L

Water pump, alternator and power steering
Ribbed 7 K x 1605
Air conditioning compressor
Ribbed 5 K x 980

BMW 750i/L

Alternator, power steering
Ribbed 7 K x 1035
Coolant pump, compressor for air conditioning
Ribbed 6 PK x 1195

BMW 725tds

Water pump, alternator and power steering
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